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Treatise on the Excision of Diseased Joints. By JAMES SYME, F.R.S.E. With five Engravings by Lizars. 8vo. pp. 163. Longman and Co. London, 1831.

AMIDST the numerous contributions which the zeal and skill of modern surgeons have made to the advancement of knowledge in the healing art, there are few more valuable than the successful execution of the operation for the excision of diseased joints. To many individuals, in the humbler classes of society, the loss of a limb is almost equivalent to the deprivation of the means of procuring subsistence. That surgeon, therefore, who is enabled to preserve so essential a portion of the body deserves the respect of scientific men and the gratitude of mankind. As to the history of the early cases in which this operation was performed, of the surgeons who performed it, or of the results they obtained, it is not our province to enter into any statement, since with all these points every surgical practitioner, or student is, or ought to be, already familiar. It is sufficient for us here to observe, that though executed with success by Mr. White, of Manchester, in the year 1768, in 1781 Mr. Park, of Liverpool, excised a carious knee-joint, and the operation was followed by such a happy result that the patient (a sailor), to use Mr. Park's words, "was enabled to go aloft with considerable agility, and to perform all the duties of a seaman." The unfortunate termination of his second operation seems to have deterred Mr. Park from any subsequent trial; and Mr. Philip Crampton, of Dublin, although remarkably successful in an operation performed by him at a much later period, did not follow up the subject in a manner which we should have expected from his talent and opportunities. Mr. Syme does not present himself to us as a discoverer, but not the less praise should be awarded to him for having established the excision of a diseased joint as a regular surgical operation, and one which every surgeon should hold himself prepared to perform under fitting circumstances.

From the cases recorded in this volume, it appears that Mr. Syme has excised fourteen elbow-joints, and that a similar operation has been performed in Edinburgh three times by other practitioners. Of these seventeen cases (only two of which terminated unfavourably), a plain, and apparently not exaggerated account, is contained in the present treatise. Two cases are given of excision of the shoulder, fourteen of the elbow, and two of knee-joints. A curious coincidence was here, he remarked, in the number and events of all the cases of the last operation yet performed in this country. Park and Crampton excised the knee-joint in two instances, and each lost one of his patients; and the same result has attended two similar operations described by Mr. Syme. The first case recorded in Mr. Syme's work contains a description of his method for excision of the shoulder-joint. The introductory remarks are here so valuable, that we willingly transfer them to our columns:—

"About five years ago I met with a case which afforded a very favourable opportunity of reviving this obsolete proposal, and carried it into effect with such success as confirmed me in the opinion of its advantages that I had previously been led to entertain. Before relating the particulars of this case, it will be proper to make some general observations on the mode of performing the operation in this situation.

"The humerus is not always affected to the same extent, but the whole of its head, that is to say, all that part above the attachments of the *pectoralis major* and *latissimus dorsi* muscles ought to be taken away; and this should be done in the first instance,

to afford room for getting access to the scapular part of the disease. The glenoid cavity is sometimes affected only in a part of its surface, but the whole of it ought to be removed on the general principle already stated. The acromion process, though not entering into the formation of the joint, sometimes participates in the disease, and then, of course, requires removal no less than the other parts concerned. The axillary plexus lies at such a distance below the joint as to be perfectly safe, provided the surgeon opens the articulation at its external or lateral part, and then cuts close to the bones. The only vessel of a size that renders the necessity of a ligature at all probable, is the posterior circumflex artery, which may be either tied at the time it is cut, or compressed by an assistant, until the operation is finished. The joint may be opened by incisions made in various directions; a single perpendicular one from the acromion will hardly be sufficient, except in such cases as Mr. White's, or in recent gun-shot wounds, where the surrounding parts are not thickened or preternaturally adherent, and where the comminution of the bone renders its free exposure for the application of a saw unnecessary. Mr. Bent made a perpendicular incision, commencing midway between the acromion and coracoid process, and then cut inwards or towards the sternum from both extremities of this incision, so as to form an oblong flap of the *pectoralis major* and clavicular portion of the deltoid. It is difficult to conceive a plan of operating more dangerous to the axillary plexus than this one, or less favourable to the easy and effectual attainment of the objects in view. Sabatier proposed to extirpate a portion of the integuments and deltoid of a V shape, which, though not so objectionable in respect to its danger and inconvenience in the first instance, must be regarded as extremely adverse to a speedy and satisfactory cure. Moreau made a square flap of the deltoid, turned it down, and then gained what more room was required, by cutting upwards at both extremities of the transverse incision, so as to obtain another flap. Mr. Morel, in operating on account of a gun-shot wound of the shoulder-joint, six months after it was received at the battle of Waterloo, made a semilunar incision with the convexity downwards, so as to form at once a large flap from the deltoid. This mode of procedure does not appear to have been very convenient, if we may judge from what is stated by Mr. Morel as to the length of time required for the operation, which was no less than three quarters of an hour, and the quantity of blood lost, viz. two pounds.

"I believe that the best way of bringing the bones completely within reach with least injury to the soft parts, is to make a perpendicular incision from the acromion through the middle of the deltoid, nearly to its attachment, and then another shorter one upwards and backwards, from the lower extremity of the former, so as to divide the external part of the muscle. The flap thus formed being dissected off, the joint will be brought into view, and the capsular ligament, if still remaining, having been divided, the finger of the surgeon may be passed round the head of the bone, so as to feel the attachments of the spinati and subscapular muscles, which can then be readily divided by introducing the scalpel first on the one side, and then on the other. After this the elbow being pulled across the fore part of the chest, the head of the humerus will be protruded, and may then be easily sawn off while grasped in the operator's left-hand. The subsequent part of the operation will be conducted on the principles already explained, and, as it is of course desirable to preserve as much mobility as possible, no means should be used to restrain motion further than are necessary for preventing irritation and displacement. The *pectoralis major* and *latissimus dorsi* tend to draw the extremity of the bone inwards; but this may be easily prevented by placing a cushion in the axilla.

The result of the second operation on the shoulder-joint was not so favourable, the patient died of pectoral disease six months after the excision. For the details we must refer our readers to Mr. Syme's work.

Fourteen cases of excision of the elbow-joint are next given, which fully establish the propriety and practicability of substituting this mode of operation in many cases where amputation was formerly considered indispensable; only two of the fourteen terminated fatally. We select a successful and an unsuccessful case, that our readers may have an impartial view of the subject:—

"Mr. Y., twenty-four years of age, about fourteen months before asking my assistance, began to feel flying pains in the left elbow-joint. He could not in any way account for the origin of this complaint, and paid little attention to it, until after the lapse of several months it became gradually much aggravated, and accompanied by a weakness of the limb, which at length deprived him of its use. The joint being now considerably swelled, was leeched, but without any relief. Poultices were then applied for several weeks, when the practitioner in attendance made an incision over the inner tuberosity of the humerus, and evacuated a large quantity of matter. Other incisions were subsequently made in different parts of the arm for the same purpose. Though

somewhat relieved, after the discharge of these abscesses, he still continued to be tortured with pain, which was particularly severe during the night, when it not only deprived him of rest, but almost made him distracted.

"I saw him first in October 1828, and found his strength, as well as appetite, less impaired than might have been expected. His countenance, however, betrayed intense and long-continued suffering, and exhibited very remarkably that peculiar anxious look which so often accompanies disease of the bones. The limb was perfectly powerless, and œdematous from the lower third of the humerus downwards. After several unsuccessful trials, I succeeded in passing a probe into the posterior part of the joint, which was then felt to be extensively carious.

"As the disease appeared to be confined to the bones, as the patient was young, and as the irritation of the disease was much greater than any that could result from an operation which had the effect of removing the source of it, I resolved to cut out the joint, and accordingly performed the operation on the 3rd of November, in the presence of Professor Russell and Sir George Ballingall.

"Having placed the patient on a sofa, so as to present the elbow in a favourable position, I made a transverse incision at once into the joint immediately above the olecranon, and extending to the radial tuberosity of the humerus, but at such a distance from the inner one as to avoid the ulnar nerve. I then cut upwards and downwards for about an inch and a half at each extremity of the first incision, so as to form two square flaps, which being dissected from the subjacent bones, exposed them completely. Having ascertained that the ulna was carious as far as the coronoid process, I sawed it across at this part, and then insulating the extremity of the humerus, divided it in the same way immediately above the tuberosities. I, lastly, removed the head of the radius, which was very much diseased.

"No vessel required a ligature, but there was a considerable general oozing from the cut surface. After exposing the wound for a few minutes, and sponging it with cold water, I brought the flaps together, and retained them in contact by means of one stitch in each of the perpendicular incisions, and three in the transverse one. Some compresses of lint and a roller were then applied, after which the patient was put to bed. Those present were much struck by the very slight alteration that appeared in the shape of the limb after the stitches were introduced.

"On the following morning, I found that the patient had passed an indifferent night, and was looking rather anxious and exhausted from want of sleep, notwithstanding an opiate which he had taken the preceding evening. His pulse, however, was good, and he had had no rigor or other unpleasant symptom. As his bowels had not been evacuated the day before, I directed an injection to be administered without delay. In the evening, he was in all respects well; a soft pulse, a clean tongue, and a countenance nearly free from the expression of anxious distress, which had characterised it previously to the operation, led me to conclude that there was little reason for apprehension.

"Great part of the wound healed by the first intention, leaving very little deformity; but the cure was delayed by an œdematous state of the limb, which distended the newly-formed cicatrix, and impeded the contraction of the granulations in those parts which did not unite in the first instance. To counteract this disposition, I used fomentations with warm salt water, and the pressure of a firmly-applied flannel roller. The joint remained moveable to the natural extent; but though the patient could use his hand almost from the first, he did not regain any command over the elbow until the end of several months, and even now he does not possess much strength in it. He is able, however, to use it in giving instructions in arithmetic, &c. It may be proper to observe, that this individual is characterised by an extreme degree of what is usually called nervous constitution, and altogether a most unfavourable subject for this or any other operation."

The fifteenth case seems to have terminated fatally, because the patient was unwilling to submit to the operation at a time when his constitution had not been undermined by the disease:—

"William Rogers, aged 13, was brought to me at the beginning of last summer, on account of a diseased elbow, which seemed to admit of relief by excision. The parents were dissuaded from submitting to this proposal by the representation of a practitioner adverse to the operation, who strongly recommended amputation in its stead. As this proposal was still less acceptable than the former, the patient was sent to the country, and placed under the care of an irregular practitioner. I was asked to see him again about the middle of September, and then found that a change had taken place greatly for the worse. The swelling, instead of being circumscribed and confined to the neighbourhood of the joint, now extended half way both up to the shoulder and down to the hand. There were numerous sinuses, and, in short, an appearance of

greater derangement of structure than I had ever met with, except in the case of Elizabeth Johnstone, above related; but, encouraged by the success experienced in that instance, I still deemed it right to perform the operation.

"On the 21st of October I cut into the joint, and removed the olecranon as usual. It then appeared that the ulna was very extensively diseased, the cells of its spongy substance being filled with scrofulous matter. To make as sure as possible of taking away all the affected portion, I insulated the bone quite down to the commencement of the narrow part of its shaft, and cut it across there. As the boy Wells, who had an equally large portion of the ulna removed, made a perfect recovery, I hoped that the result in this case also would be satisfactory, notwithstanding so great a liberty had been taken with it. For nearly a week this hope promised to be realised; a good deal of inflammation, indeed, succeeded, but not more than I had frequently seen before. The clots of blood, and sloughs of diseased structure, separated by degrees, and then the swelling and tension subsided. At this stage of the case I went to the country to perform an operation, and returned the following evening, but did not see the patient till next morning, as I believed him to be doing perfectly well. His appearance then struck me remarkably. He had all along a pale, unhealthy aspect, and quick, uneasy way of breathing; but now his countenance was much more thin, pale, and anxious, and his breathing was performed with a sort of catch; he had refused his food both this day and the day before. I believe that the limb should now have been amputated; but previous success made me too confident, and I contented myself with palliating symptoms, of which a very disagreeable one that next appeared was a tympanitic distension of the abdomen. On the 30th of September, he was evidently sinking under the irritation, and I then removed the arm, with the advice of some of my friends, but certainly with very little expectation of preventing the fatal termination, which took place the day following.

"The result of this case shows that there are limits determined by the extent of the disease and the constitution of the patient, beyond which the operation cannot be extended with safety. These limits can be ascertained only by experience; and, therefore, such exceptions should be regarded as beacons, not to warn us against the operation, but rather to guide us to its safe and advantageous performance."

We now come to the concluding portion of the work, which is occupied by two cases of excision of the knee-joint; as we have already noticed, one of them terminated fatally.

The length to which our extracts have extended prevents us from entering more deeply into the merits of Mr. Syme's instructive work. We may, however, briefly say, that it deserves the attentive consideration of every practical surgeon, and that Mr. Syme's example should be followed by all who feel themselves competent to undertake an operation, which demands an accurate knowledge of anatomy, and great skill, dexterity, and self-possession, in the performance. In conclusion, we are bound to add our warm and willing testimony to the pathological exactness, and the excellent execution of the five beautiful engravings which illustrate and embellish the present treatise.

History of the Epidemic Spasmodic Cholera of Russia, illustrated by numerous Official Documents, with a Map, &c. By Bisset Hawkins, M.D. 8vo. pp. 301. London. Murray, 1831.

The professed object of this volume is "to collect into a convenient and ready form the scattered information yet obtained" on this topic of universal interest, in order that in the event of the outbreaking of the disease in Great Britain, "country magistrates, clergymen, and medical practitioners residing at a distance from opportunities of information, should be enabled to possess the painful experience acquired in other countries."

The beneficial tendency of such a work, if properly executed, cannot be questioned for a moment. It also appears to us completely unnecessary that the compiler of the requisite materials should have personally witnessed the ravages of the disease of which he treats. Dr. Bisset Hawkins, who has never seen a case of cholera, may contrast and determine on the opposing statements of the actual observers of the malady, with the same precision that Dr. Bostock reviews the experiments of distant rival physiologists, or that the presiding officer in a court of justice decides on the testimony in a case, with the actual bearings of which he is personally unacquainted.

It is but strict justice to the author, to state that throughout this work he manifests much industry, some research, and the most exemplary freedom from the spirit of partizanship, in the discussion of the questions, connected with the cholera morbus, which still remain the subjects of litigation. Some extracts we shall presently make will fully bear us out in the latter commendation, and it will be seen also that they corroborate and enforce the opinions which, in former articles, we advanced with respect to the disputed contagiousness of the disease.

The principal if not the only fault we have to criticise in the work itself, is the total want of order in the arrangement of its contents. To the medical reader this is, perhaps, of less consequence, but to the non-professional part of the community it renders the work of comparatively inferior value. It is but right to allow that the author makes a prominent confession of this fault in his introduction, and exculpates himself on the ground of the haste in which the compilation was prepared.

Having said thus much of the general merits of the volume, we must decline entering into any enumeration of its particular contents, since, from their desultory and multiplied character, we should be forced to copy the index altogether, if we attempted to specify the various topics it embraces. We now proceed to extract some interesting passages from Dr. Hawkins's chapter, in which the contagious nature of the disease is considered.

"Sir Gilbert Blane has justly observed, that the circumstance which most obviously distinguishes an epidemic arising from morbid poison engendered in the human body, from epidemics caused by affections of the atmosphere, whether consisting in *alterations of temperature*, or in *contaminations from the soil*, is, that the progress of the former will necessarily be *progressive*, and traceable to human intercourse, whereas the influence of the latter will as certainly be *contemporaneous* in situations more or less distant. It will be clearly perceived, by a careful perusal of the preceding history (and of the Indian reports in our appendix), that the spread of this malady has been strictly progressive, and evidently carried by human beings from one district to another; nor is it conceivable that the requisites of temperature and contamination of the atmosphere necessary to prove any other than a contagious origin, could have occurred at those spots and periods in which the disease showed itself in its progress by sea and land, as is historically described in the previous and subsequent narrative. This is no-where more striking than at the Mauritius. This island is near three thousand miles from the other places at which the epidemic raged; and can any mind be so constituted, as to believe that a new disease of the identical nature of that which had ravaged all India, should have shown itself by mere accident at the very time when its appearance was in exact conformity with the supposition of its being imported by a frigate?"

Of the route which the disease pursued from place to place in Europe, and of the light thus thrown on its mode of propagation, Dr. Hawkins speaks as follows:—We should premise that he is indebted to the *Edinburgh Medical and Surgical Journal* for the facts his statement contains.

"Cholera first appeared on the frontiers of the Astrachan government on the 3d of July, on board a ship of war, which had arrived from Baku (three hundred and fifty miles from the Caspian), and lay sixty miles from Astrachan. Till the 20th of the month the disease was confined within the Sedlitooski Lazaretto, whither the vessel with the sick had been brought. But on that day four people were taken ill in the city, near the river Kutum; and from this point the disease imperceptibly spread over the whole town, carrying off a great number of people. After the 27th it attacked the suburbs, then the nearest villages, and then gradually extended over the whole government. * * * In reaching Astrachan from Baku, it passed over all the intermediate districts of the Russian territories. * * * The first places attacked after Astrachan were several Tartar villages in the immediate vicinity, at a distance of from two to four miles, the inhabitants of which were in constant communication with the town, and to which also many families fled out of it as the disease spread. On the 27th July it also appeared in the village of Tscherepacha, eight miles from Astrachan, on the return of some inhabitants, who had been to the town in search of work, and one of whom was the first person taken ill. After the 29th, it proceeded through the Cossack stations and the town of Eustacosk, on the highway to Moscow, up the stream of the Wolga, its extension in this direction evidently accompanying the fugitives from the places successively attacked. In the town of Eustacosk it spread with the arrival of a sick boor. On the 29th of July, a barge arrived at Tchernojar, one hundred and fifty miles up the Wolga, with several rowers on

board, who were ill of cholera. On the 8th August the disease began to prevail among the inhabitants, and then passed across the river among the neighbouring Kirghies, as well as upwards to the villages of Solodnikovsko and Vaisovka, in one of which the person attacked was a military prisoner, who had been exposed to the disease. On the 25th July, the epidemic also began in Krasnojar, situated on the northern mouth of the Wolga, twenty miles from Astrachan; and it first seized a private of invalids and a girl of thirteen years of age, who had both recently come from that capital. On the third August, it appeared in the estate of M. Nekrasov, ten miles from Krasnojar, and among the Algarine hills, in the vicinity of the town, from which it finally extended down to the Cossack Cordon on the Caspian, between which and Krasnojar there is constant communication. While the disease prevailed in Astrachan, some fishermen were there from Makovsky and Schitninsky, two places on the shore of the Caspian, where the Wolga opens into it. These men, terrified at the progress of the epidemic, hastened home to place themselves, as they imagined, in security; but they had already imbibed the poison; some fell sick on the way, others after arriving at their homes, and the disease soon spread throughout the community to which they belonged.

"On the 2d August the salt depôt of Basinsk, in the Caucasian kingdom,' ten miles off the highway, was subjected to the general pestilence. On the 1st of the month an Armenian, convalescent from cholera, arrived at the house of a private of the depôt, who was taken ill and died next day, and other cases occurred afterwards. At the salt depôt likewise of Kijataka, twenty miles from Krasnojar, a private soldier was taken ill, who had been sent thither from Astrachan with medicines and instructions for the inhabitants in case the disease should appear among them, and various individuals were attacked subsequently.

"Many gardens and farms in the neighbourhood of Astrachan remained exempt from the epidemic, having broken off all intercourse with the diseased districts. In many villages, too, where similar measures of security were taken, the issue was equally fortunate, although the cholera raged all around them; for example, in the lordships of Smirnov, Beketov, and Prince Dolgoruki, in Sarepta, eight miles from Zaritzin, and some other places. On the other hand the Kalmucks, who, as soon as the disease appeared among them, left their sick comrades behind them, and repaired to pasturage-grounds fourteen miles off and more, did not in this way get rid of their fatal visitor—fresh cases occurred among the families who were first attacked.

"At Astrachan many instances occurred where the greater part of the members of a family were taken ill in succession. Dr. Solomow cannot believe that *local* causes could have produced the epidemic, because the two seasons previous to 1830 had been much more favourable than it to the extension of a disease of local origin, as the country had been then much flooded.

"Wherever measures were taken to prevent communication in the Russian dominions, there the disease has been totally checked, or has made but little progress. Petersburgh has not escaped, because a strict quarantine has not been observed between it and Moscow. The Moravian colony on the right bank of the Wolga, and several German colonies in the government of Saratov, around which the disease was violent, adopted the system of exclusion, and were also unhurt. At Catamals-Gubeewa some Russian peasants living together, scarcely a hundred yards from the village, shut up their hamlet on the first report of the disease having appeared in their vicinity, and by enforcing a strict quarantine during the prevalence of the epidemic, remained in health. The large establishment composing the Academy of Military Cadets at Moscow, was preserved by a similar plan from the scourge, which was so active on all sides of it. Can we have a better proof of the contagious nature of the disease, than that *insulation*, or separation from the sick, is almost universally found to preserve from the evil?"

Dr. Hawkins next cites the strong facts contained in Keraudren's treatise, regarding the immunity enjoyed by the French consul at Aleppo, in consequence of the insulation he preserved. He then proceeds to observe:—

"At Dantzic we find that the disease has prevailed for several weeks, having probably been first imported by sea. It has not extended from Dantzic to any of the neighbouring towns or districts of Prussia. The Prussian government enforces a very strict quarantine. Can we imagine any noxious element in the air or in the earth at Dantzic, which should produce the disease in that sea-port, and confine it to that alone of all the towns of Prussia? Is it not a more easy solution of the difficulty to presume that it was communicated to Dantzic by contagion, and that it has not yet travelled thence through other parts of Prussia, because the evil has been pent up, and has not been permitted to diffuse itself, being rigidly hemmed in on all sides by a strong

medical and civil police? The Cape of Good Hope has escaped the disease, and for no better reason that we can discover, than through the very rigid system of quarantine which was formed by the Dutch, and on the strict maintenance of which they stipulated in their articles of capitulation."

Some very sensible remarks next occur concerning the partizan spirit by which it is evident that many of the Indian officers have been actuated in their rejection of the contagion doctrine. The author then alludes to the protection afforded by moral courage, and cites the remark as an argument against the anti-contagion inference derived from the comparative immunity of the medical men who superintended the treatment of the disease. He then justly contends that,—

"The middle course of reasoning is, on this subject, probably the true, as well as the safe one. There is no necessity for embracing either extreme—for becoming entirely a contagionist, or an anti-contagionist. We may easily conceive that a disease may originally be produced by local or other causes, which may not be endued with a self-communicating power at its birth, but which may, nevertheless, acquire the contagious element as it proceeds and gathers strength through the new circumstances which occur in its passage. Let us admit, if it be necessary, that the disease was not contagious in India, or let us suppose that its original sphere of contagion was so limited as to be scarcely sensible. Still that very limited sphere may be gradually extended to a certain degree, and the disease may yet finally remain less powerful in its contagious operation than most of the other diseases which are classed under that denomination. We speak of the laws of contagion, but who can define them? As many shades and varieties may exist in the contagious element, as in those fluctuating groups of symptoms to which the name of a particular disease is affixed.

Lastly, after a conclusive exposure of the influence of *poverty* in predisposing to this disease, and a humane and *practical* appeal to the benevolence of the richer classes in the event of its appearing in this country, Dr. Hawkins sums up his conclusions in the following words:—

"After carefully reviewing the various statements and reasonings on the mode in which this disease is propagated, and of the means by which it may be averted, we cannot avoid arriving at the conclusion, that the disease in India was *probably* communicable from person to person, and that in Europe it has *undeniably* proved so. Nevertheless, we must allow that its contagious power is more *limited* than that of the plague, and of some other disorders styled contagious. Its attacks are chiefly confined to the lower classes, and it seems, in a few words, *to require a particular disposition to receive it*. What that disposition is, has been repeatedly mentioned in the preceding pages, and will be further illustrated in the appendix.

With respect to merchandise, a general opinion is entertained in Russia that goods are not capable of propagating it. This subject, however, has hitherto elicited little save negative evidence. We know how strongly commercial and even political feelings are arrayed against a proper circumspection on this head. Two of the most prudent and economical governments in Europe have established a quarantine on merchandise, and this circumstance alone should be sufficiently strong to induce others to adopt the same caution, because these are two of the states most near to Russia, and most likely to have obtained ample and correct information. One remarkable fact in favour of its propagation by goods has lately been published by the Norwegian government, which declares that, out of one hundred and sixty-nine deaths at Riga, in three days, an eighth part had been *carriers of hemp*.

"Medical men are usually very reluctant to admit any existence which is not actually visible to their senses, and contagion, accordingly, is a principle which they have always been slow to admit in an old disease, and still more tardy in granting to what may be termed a new one. Dr. Macmichael has shown how much ingenuity was wasted, in every possible explanation, before even the small-pox was allowed to be contagious, a fact of which Sydenham does not seem to have been aware."

The length to which these extracts have extended forbids our making them the subject of any additional observations. We content ourselves, therefore, by adding that with the exception of the French history of the disease by M. Moreau de Jonnes, Dr. Hawkins's work contains more ample resources for reference and comparison than any other with which we are acquainted.

DESCRIPTION OF THE CHOLERA MORBUS.

By DRS. BARRY *and* RUSSELL.

We have to request the particular attention of our readers to the following excellent description of the cholera morbus, extracted from an otherwise insignificant pamphlet just published by the Board of Health. We are informed by those who have witnessed the disease in its worst forms, that nothing can exceed the fidelity of this Report. The prominent place the authors assign to the "*leaden blue, purple, brown, or even black*" hue of the skin, and the force with which they dwell on the comparatively slight importance of the vomiting and purging, combine to render the diagnosis between the Indian pestilence and our autumnal epidemics, a matter of certainty and ease. The perusal of this narrative will also, we think, tend to effect an important change in the opinions of those who have hitherto opposed venesection as a curative agent. We await the observations of Drs. Barry and Russell, on the treatment of the disease with much interest, and in the strong hope that the scientific manner in which they have commenced its investigation, will lead to the establishment of more rational therapeutic measures, than those which empiricism or terror has hitherto prescribed:—

Extract from the joint Report of Drs. Russell and Barry.

St. Petersburgh, $\frac{11}{23}$ July, 1831.

Sir,—Although there can be no doubt that the disease now prevailing here is strictly identical, in all essential points, with the epidemic cholera of India; and although there are many descriptions extant of that malady, much more ably and accurately draw up than any which we can pretend to give; yet we are induced to believe that a short account of the symptoms which we ourselves have actually witnessed and noted at the bedside in some hundreds of cases, since our arrival here, may be useful,—first, because we are not aware that any description by an eye-witness of European cholera has yet been addressed to the British government; secondly, because the disease, as it has shown itself in this capital, when closely compared with the Indian cholera, appears to have undergone some modifications; thirdly, because, having now studied the disease in all its stages, our description, however imperfect, will at least assist towards establishing a standard of comparison with other local epidemics of cholera in Europe, and may, perhaps, enable those who have not seen this disease, to recognise it with more certainty than they would otherwise be able to do.

The cholera morbus of the north of Europe, to which the Russian peasants have given the name of "Cholernaia colezn," or *black illness*, like most other diseases, is accompanied by a set of symptoms which may be termed preliminary; by another set which strongly mark the disease in its first, cold, or collapse stage; and by another set, which characterise the second stage, that of reaction, heat, and fever.

Preliminary Symptoms.

We have but few opportunities of witnessing the presence of all these symptoms, some of which precede the complete seizure by so short an interval, that the utmost diligence is scarcely sufficient to bring the patient and the physician together, after their occurrence, before the disease is fully formed. Diarrhœa, at first feculent, with slight cramps in the legs, nausea, pain, or heat about the pit of the stomach, malaise, give the longest warning. Indeed, purging, or ordinary diarrhœa, has been frequently known to continue for one, two, or more days, unaccompanied by any other remarkable symptom, until the patient is suddenly struck blue, and nearly lifeless. Often the symptoms just mentioned are arrested by timely judicious treatment, and the disease completely averted. When violent vertigo, sick stomach, nervous agitation, intermittent, slow, or small pulse, cramps, beginning at the tips of the fingers and toes, and rapidly approaching the trunk, give the first warning: then there is scarcely an interval. Vomiting or purging, or both these evacuations, of a liquid like rice-water or whey, or barley-water, come on; the features become sharp and contracted, the eye sinks, the look is expressive of terror, wildness, and, as it were, a consciousness on the part of the sufferer that the hand of death is upon him. The lips, the face, the neck, the hands, the feet, and soon the thighs, arms, and whole surface, assume a leaden, blue, purple, black, or deep-brown tint, according to the complexion of the individual, varying in shade with the intensity of the attack. The fingers and toes are reduced at least a third in thickness; the skin and soft parts covering them are wrinkled, shrivelled, and folded; the nails put on a bluish pearl-white; the larger superficial veins are marked by flat lines of a deeper black; the pulse is either small as a thread, and scarcely vibrating, or else to-

tally extinct. The skin is deadly cold, and often damp; the tongue *always moist*, often white and loaded, but flabby and chilled, like a bit of dead flesh. The voice is nearly gone; the respiration quick, irregular, and imperfectly performed. Inspiration appears to be effected by an immense effort of the chest, whilst the alæ nasi (in the most hopeless cases, and towards their close), instead of expanding, collapse, and stop the ingress of air. Expiration is quick and convulsive. The patient asks only for water, speaks in a plaintive whisper (the "vox cholerica"), and only by a word at a time, from not being able to retain air enough in his lungs for a sentence. He tosses incessantly from side to side, and complains of intolerable weight and anguish around his heart. He struggles for breath, and often lays his hand on his stomach and chest to point out the seat of his agony. The integuments of the belly are sometimes raised into high irregular folds, whilst the belly itself is violently drawn in, the diaphragm upwards and inwards towards the chest; sometimes there are tetanic spasms of the legs, thighs, and loins; but we have not seen general tetanus, nor even trismus. There is occasionally a low suffering whine. The secretion of urine is always totally suspended, nor have we observed tears shed under these circumstances; vomiting and purging, which are far from being the most important or dangerous symptoms, and which, in a very great number of cases of the present epidemic, have not been profuse, generally cease, or are arrested by medicine easily in the attack. Frictions remove the blue colour for a time from the part rubbed; but in other parts, particularly the face, the livor becomes every moment more intense and more general. The lips and cheeks sometimes puff out and flap, in expiration, with a white froth between them, as in apoplexy. If blood be obtained in this state, it is black, flows by drops, is thick, and feels to the finger colder than natural. Towards the close of this scene, the respiration becomes very slow, there is a quivering among the tendons of the wrist; the mind remains entire. The patient is first unable to swallow, then becomes insensible; there never is, however, any rattle in the throat, and he dies quietly after a long convulsive sob or two.

The above is a faint description of the very worst kind of case, dying, in the cold stage, in from six to twenty-four hours after the setting in of the bad symptoms. We have seen many such cases just carried to the hospital from their homes or their barracks. In by far the greater number, vomiting had ceased, in some, however, it was still going on, and invariably of the true serous kind. Many confessed that they had concealed a diarrhœa for a day or two; others had been suddenly seized, generally very early in the morning.

From the aggravated state which we have just described, but very few indeed recover, particularly if that state has been present even *for four hours* before treatment has commenced. A thread of pulse, however small, is almost always felt at the wrist, where recovery from the blue or cold stage is to be expected. Singular enough to say, hiccough coming on in the intermediate moments, between the threatening of death and the beginning of reaction, is a favourable sign, and generally announces the return of circulation.

In less severe cases, the pulse is not wholly extinguished, though much reduced in volume; the respiration is less embarrassed; the oppression and anguish at the chest are not so overwhelming, although vomiting and purging and the cramps may have been more intense. The coldness and change of colour of the surface, the peculiar alteration of the voice, a greater or less degree of coldness of the tongue, the character of the liquids evacuated, have been invariably well marked in all the degrees of violence of attack which we have hitherto witnessed in this epidemic. In no case or stage of this disease have we observed shivering; nor have we heard, after inquiry, of more than one case, in which this febrile symptom took place.

Fever, or Hot Stage.

After the blue cold period has lasted from twelve to twenty-four, seldom to forty-eight hours or upwards, the pulse and external heat begin gradually to return; headach is complained of, with noise in the ears; the tongue becomes more loaded, redder at the tip and edges, and also drier. High-coloured urine is passed with pain and in small quantities, the pupil is often dilated, soreness is felt on pressure over the liver, stomach, and belly; bleeding by the lancet or leeches is required; ice to the head gives great relief; in short, the patient is now labouring under a continued fever, not to be distinguished from ordinary fever. A profuse critical perspiration may come on from the second or third day, and leave the sufferer convalescent; but, much more frequently, the quickness of pulse and heat of skin continue; the tongue becomes brown and parched, the eyes are suffused and drowsy, there is a dull flush, with stupor and heaviness about the countenance, much resembling typhus; dark sordes collect about the lips and teeth; sometimes the patient is pale, squalid, and low, with the pulse and heat below natural, but with the typhous stupor; delirium supervenes, and death takes place from the fourth to the

eighth day, or even later, in the very individual too whom the most assiduous attention had barely saved in the first or cold stage. To give a notion of the importance and danger of cholera fever, a most intelligent physician, Dr. Reimer, of the merchant hospital, informs us, that of the twenty cases treated under his own eye, who fell victims to the disease, seven died in the cold stage, and thirteen in the consecutive fever.

The singular malady is only cognizable with certainty during its blue or cold period. After reaction has been established, it cannot be distinguished from an ordinary continued fever, except by the shortness and fatality of its course. The greenish or dark, and highly bilious discharges produced in the hot stage, by calomel, are not sufficiently diagnostic, and it is curious that the persons employed about these typhoid cases when they are attacked, are never seized with ordinary fever, but with genuine cold blue cholera. Nothing, therefore, is more certain, than that persons may come to the coast of England, apparently labouring under common feverish indisposition, who really and truly are suffering under cholera in the second stage.

The points of difference between the present epidemic and the cholera of India, when the two diseases are closely compared, appear to us to be the following:—

First, The evacuations, both upwards and downwards, seem to have been much more profuse and ungovernable in the Indian than in the present cholera, though the characters of the evacuations are precisely the same.

Secondly, Restoration to health from the cold stage, without passing through consecutive fever of any kind, was by far more frequent in India than here, nor did the consecutive fever there assume a typhoid type.

Thirdly, The proportion of deaths in the cold stage, compared with those in the hot, was far greater in India, according to Dr. Russell's experience, than here.

Fourthly, The number of medical men and hospital attendants attacked with cholera during the present epidemic, in proportion to the whole employed and to the other classes of society, has been beyond all comparison greater here than in India under similar circumstances; twenty-five medical men have been already seized, and nine have died out of two hundred and sixty-four. Four others have died at Cronstadt, out of a very small number residing in that fortress at the time the disease broke out there. Six attendants have been taken ill at a small temporary hospital behind the Admiralty since we wrote last. It is certain, however, that in some cholera hospitals, favourable circumstances as to size, ventilation, and space, very few of the attendants have suffered.

Of these facts we are likely to receive accurate statements in answer to the written questions which we have submitted to the medical authorities through the government here.

Convalescence from cholera has been rapid and perfect here, as is proved by the following fact:—The Minister of the Interior had given orders that all convalescents, civil as well as military, at the General Hospital, should be detained fourteen days. We inspected about two hundred of these detenus some days back, with Sir James Wylie, and found them in excellent health, without a single morbid sequela among them.

Relapses are rare in this epidemic, nor have they been often attended with fatal results; hospital servants seem to have been most liable to them. One physician had three attacks, the second severe, in which he states that he derived great benefit from the magisterium bismuthi.

In our next we shall resume the medical history of the disease, and have, &c.

(Signed) William Russell, M.D.
D. Barry, M.D.

C. C. Greville, Esq., &c., &c.

Attacked from 13th to 14th (O.S.) in twenty-four hours 292
Deaths, ditto 108
Cured, ditto 164

FORENSIC MEDICINE.

POISONOUS PROPERTIES OF CONCENTRATED ACETIC ACID.

The following memoir possesses great interest, and will be advantageously studied by all the cultivators of forensic medicine. Up to the present time, the acetic acid has been excluded from the best systems of toxicology, on the supposition that it was possessed of no deleterious properties. This singular error M. Orfila completely controverts in the subjoined essay. The chemical investigation of the case, which led to the examination of the subject in an abstractedly toxicological point of view, deserves minute attention. It will be remarked, that the experimentalists had no clue to guide them in their search for any particular poison. Their analysis had therefore to be of

the most comprehensive kind; to include in its indications all the poisonous agents susceptible of detection by chemical analysis. The accomplishment of a process of this kind has appeared so fraught with difficulty, that the best British medical jurist has even deemed it impracticable. The present investigation, however, clearly establishes the value of the general mode of proceeding.

ON POISONING BY ACETIC ACID.

BY M. ORFILA.*

The strong caustic taste of radical vinegar was sufficient to lead to the supposition, that if introduced into the stomach it might act as a phlogistic poison, determining inflammation and death. Pyroligneous acetic acid, though less caustic than the preceding, is also sufficiently strong to exert an analogous action. Toxicologists, however, have hitherto been silent on the subject, a circumstance which, perhaps, depends on no mention having been made by physicians of any accident thus produced, or on toxicologists having concluded without investigation, that the action of strong acetic acid was similar to that of the other mineral acids. A recent occurrence enables me to supply this defect in toxicology: a young woman having died of poisoning, and chemical analysis having indicated only acetic acid in the digestive canal, I was led to make further experiments in order to elucidate the subject.

EXPERIMENTS ON DOGS.

First Experiment.

When about an ounce of concentrated pyroligneous acetic acid is introduced into the stomach of dogs of middle size while fasting, and the œsophagus being subsequently tied, the animals quickly give indications of suffering; nausea and attempts at vomiting succeed, prostration of strength, and the usual symptoms of irritant poisoning supervene, and the animals die in five, six, or seven hours from the commencement of the experiment.

Examination of the Bodies.—The stomach contains a quantity of fluid of a bistre colour, when rubbed on thin layers on the hand, and black when collected together. The mucous membrane is covered with a similar layer, and it preserves a black colour even after being scraped. It is slightly thinned, and adherent to the muscular coat. The submucous cellular tissue is slightly infiltrated with a reddish liquid. The muscular tissue is of a redder colour than natural. The serous coat is unaltered in appearance. The blood contained in the veins is coagulated and black. Occasionally minute superficial corrosions are observed in the mucous membrane towards its pyloric extremity. Various other parts of the alimentary canal present similar appearances.

Second Experiment.

If, instead of pyroligneous acetic acid, radical vinegar, or that obtained from the acetate of copper, be employed, the symptoms of poisoning are still more serious. A young dog of middle height swallowed about three drachms of concentrated radical vinegar: a minute quantity of the acid penetrated into the air passages. Prostration, nausea, vomiting, and cough, quickly occurred. In an hour he seemed to recover strength, but to suffer more pain, and he refused food. On the following day the cough, abdominal pain, and want of appetite, continued, and the weakness increased. He was now forced to swallow an ounce of the same acid. No vomiting was induced, but all the other symptoms of poisoning became more severe, and death ensued in an hour and a quarter.

Examination of the Body.—There was an ulcerated perforation of the cardia, and two other perforations were also remarked at the lesser curvature of the stomach, one of round shape, four lines in diameter; the other elongated to the extent of about eight lines. The edges of these ulcers were softish and irregular. The mucous membrane of the stomach was almost totally destroyed, and reduced in many points to a gelatinous consistence. The muscular tunic was covered with a slight brown layer, except towards the pylorus, where it preserved its natural tint; the tunic itself was of a whitish colour, like the lips of persons who have eaten of dishes strongly acidulated with vinegar. This decoloration was especially remarkable in the pyloric region. The consistence of the muscular and serous coats was not diminished. The blood-vessels of the stomach were increased in size, and contained coagulated blood. The intestines were altered as in the first experiment.

Third Set of Experiments.

When dogs of middle size, and fasting, are forced to swallow four or five ounces of common vinegar, vomiting being prevented by the ligature of the œsophagus, symptoms analogous to those already described are also observed, and the animals die in ten, twelve, or fifteen hours, and similar appearances are noticed to those described in the first and second sets of experiments.

CASE OF POISONING BY ACETIC ACID IN THE HUMAN SUBJECT.

A. C., æt. 19, died on the 8th of last May at half-past four A.M., in one of the streets

* Annales d'Hygiène Publique et de Médecine Légale. No. II. Juillet, Paris, 1831.

of the Petit Gentilly of Paris, and it appears from the anatomical and chemical investigations that death was occasioned by acetic acid. The information collected by the examining magistrate was to this effect, that on the 7th of May, about 11 P.M., a young person was heard uttering moans, and apparently drunk, in the public street; she never-theless went off after asking her way. On the 8th, at half past three A.M., she was found lying in extreme agony near the wall of a public-house in the Petit Gentilly. At four A.M. some sweetened wine and warm milk were given her, and she soon fell into strong convulsions, and complained of her stomach; her symptoms then redoubled, and she died very shortly after. The body was opened by MM. Denis and Marat, surgeons to the Bicetre, who drew up the following report:—

Report, &c.

We the undersigned, doctors in medicine and surgery, certify that we found the following appearances and lesions in the body of A.:—

Externally.—Middling fulness of person, no cadaveric rigidity, slightly green tint of the skin about the groins and the linea alba of the abdomen; moderate meteorismus of the belly; the neck, shoulders, posterior part of the trunk, and the limbs, were of violet tint from sanguineous infiltration of the skin.

Digestive Organs.—The middle of the face, the circumference of the mouth, and the ala of the nose, were covered with a frothy liquid, *partly dried*, rather brown; the subjacent skin was not altered. A similar liquid was discharged from the mouth, it exhaled a feeble alcoholic smell, and the quantity amounted to two or three ounces. The jaws were closely set, the teeth white and unaltered. The mucous membrane lining the cheeks and palate was in a normal state; that of the tongue, especially in the middle part of its upper surface, was of a leathery consistence, wrinkled and brown, its glands prominent; the œsophageal mucous membrane offered the same appearances, rather in a greater degree. No false membrane or lymphy exudation occurred in the mucous membranes of the cheeks, tongue, or œsophagus.

The stomach, as seen *externally*, was distended, projecting, and apparently full of fluid. Its fint towards the pylorus was violet inclining to black. This coloration, which existed in the entire extent of the external surface, was shaded with patches of deeper tint in different directions.

Internally.—The cavity of the stomach contained nearly viii ʒ of a black-brown liquid of a faintly fœtid odour, which effervesced on the table; the parietes of the organ were coated with a brown tenacious substance like melted suet, thicker, more adherent and continuous, according as it approached the pylorus.

The mucous membrane of the stomach was no where destroyed; near the cardia it was of a greyish white and in some spots of a reddish tint. As it approached the pylorus, the colour passed to brown and black. In the smaller curvature all the coats participated in this colouring, which was like that of gangrene, nevertheless all the membranes were firm and resisting. Beneath the mucous membrane, near the pylorus, the vesicles of the cellular membrane were filled with black and coagulated blood. The mucipurous glands in the smaller curvature were numerous, projecting, and unusually hard.

The stomach, and the fluid it contained, were placed in separate vessels and sealed up. The rest of the digestive tube, which externally presented no appreciable lesion, was with its contents placed unopened in a separate vessel and also sealed up. The heart and lungs were natural. We did not deem it necessary to examine the head.

The uterus was nearly the size of the clenched hand, and was scarcely elevated as high as the pubis; it contained a fœtus of apparently two months and a half old. The development of this organ, the aspect of the fœtal membranes, the proportions of the embryo, all concurred to denote the age of the fœtus.

From all the preceding facts we consider ourselves entitled to infer that death was the result of poisoning. We leave it to chemical analysis to determine the nature of the deleterious substance.

(Signed) Lesuis and Marat.

Bicetre, May 9, 1831.

CHEMICAL EXAMINATION OF THE CONTENTS OF THE STOMACH, &c., BY MM. ORFILA AND RATIER.

Having been required by the civil officers to determine the cause of the death of the girl A. C., we drew up the following report:—

We were required to submit to analysis the stomach of the deceased, the liquids it contained, a brown powder found on her person, and some stains remarked on her apron.

To decide, 1st, whether, from the anatomical lesions, the symptoms and the results of the analysis, the deceased died of the effects of poison. If so, to determine the nature of the poison. If not, to decide on the disease of which she died.

2. To ascertain whether the brown powder contained any poisonous substance; if so, to declare its nature, &c.

3. To find if the spots on her apron were,

or were not, produced by a poisonous substance, and if so, by what poison.

In the state whether the little bottle found in Sieur M.'s garden, near the spot where the deceased was seen, containing a few drops of a liquid, apparently mixed with powder, held any ingredient of an analogous nature to the powder found on her person, and to ascertain the nature of the liquid.

We hereby declare, that having accepted the commission, and fulfilled the usual legal formalities, we commenced our examination by a careful perusal of the report of the examiners of the body. We concluded from this, the great probability of the death of the female having been produced by poison. From the remark, that the liquid removed from the stomach caused effervescence on the table, we presumed that the poisoning was produced by a strong acid. The violet black colour of the liquid, seen through the bottle, led us at first to suppose, that it was the sulphuric, but a more careful perusal of the original report at once contradicted this presumption. It will be remembered that MM. Lesueur and Murat described the black circle round the mouth as having been *partly dried*; now the well-known hygrometric properties of sulphuric acid at once showed the incorrectness of our first supposition.

The effervescence, however, was still sufficient to show that the liquid was strongly acid. We accordingly proceeded to ascertain what was its absolute nature.

The fluid contained in the stomach was therefore filtered, in order to separate some brownish matter which floated in it. Its quantity was from eight to ten ounces. It had a sharp, alcoholic, and disagreeable smell. A small portion of the filtered liquid having been placed in a glass, the addition of carbonate of lime in fine powder, to our great surprise, produced no effervescence, although turnsole test paper was reddened by its contact. This redness, however, was so faint, that it indicated rather a vegetable than a mineral acid.

The filtration being very slow, we availed ourselves of the interval to examine again the parts of the alimentary canal contained in the vessels. The stomach having been stretched out on a glass plate, and its internal surface cleaned with a moistened sponge, we perceived that the mucous membrane did not show throughout the same degree of alteration. At its greater curvature were seen alternating bands of a black colour, an inch wide, forming projections of half an inch at least. Near the pylorus we remarked three or four oval indurations, a third of an inch in diameter. By taking the stomach between the fingers, the consistence of the texture of these swellings was felt, even externally, to be considerably firm. On cutting into them, we found that they were apparently composed of extravasated blood. On the whole, we were much struck with the analogy between these appearances and that of the pathological tissue designated under the name of melanosis.

The filtration having been completed, the matter which remained on the filter was of a brown colour and pultaceous consistence, and scarcely reddened turnsole paper. The filtered liquor was of a reddish colour, and reddened turnsole paper, but produced no effervescence when placed in contact with carbonate of lime. Its consistence was slightly viscous. The nitrate of silver strewed traces of muriatic acid, or muriates, in this fluid. Muriate of baryta indicated the presence of sulphuric acid, or sulphates. Sulphuretted hydrogen gave no evidence of the least trace of any of the poisonous metals.

These data once obtained, we introduced all the remaining fluid into a glass retort placed up to its neck in a chauffer full of a concentrated solution of the chloruret of calcium (muriate of lime). To the neck of the retort we adapted a tubulated balloon with a long neck. The balloon was placed in a cold bath, and from its aperture was led a tube terminating under an inverted receiver. The solution of the muriate of lime was then brought to the boiling point; the liquid in the retort distilled over, affording a perfectly limpid product, and no gas was disengaged into the receiver over the conducting tube.

During the distillation the liquid in the retort did not coagulate, but, on the contrary, became more transparent, till it reached the consistence of a clear syrup, when it commenced to grow turbid, and a flaky matter, of a brownish-grey colour, was thrown down. The distillation was carried to dryness, the temperature of the original bath being continued all along. The apparatus was then taken to pieces, and we proceeded to examine the product of the distillation.

The fluid was clear, colourless, of a disagreeable odour, reddened turnsole paper, did not precipitate nitrate of silver nor muriate of baryta, nitro-muriatic acid being previously added. By this experiment it was ascertained that the liquid contained no trace of sulphurous, sulphuric, or muriatic acids, and it was rendered probable that it contained a very volatile vegetable acid.

To concentrate it to a small volume, and to rid it of its disagreeable odour, being necessary before we could satisfactorily ascertain its properties, we added pure carbonate of potash till the liquid was neutralized, which took place without any precipitation or change of colour. The neutralized fluid was then evaporated to dryness

on a platinum capsule, the residue, dried at a gentle heat, was of a fawn colour, free from disagreeable odour, and attracted moisture powerfully from the air, a circumstance which led us to believe that the acid in question was the acetic. Of this we soon acquired a certain knowledge by dissolving the matter on the capsule in a small quantity of water, filtering and introducing it into a small retort, with half its weight of sulphuric acid. By distillation, three scruples of sufficiently-concentrated and perfectly pure acetic acid were obtained.

It now remained to be determined whether, besides this acetic acid, the fluids of the stomach did not contain sulphuric acid in combination with animal matters, since the presence of sulphates was previously indicated by the reagents applied to the original solution. Moreover, it was necessary to ascertain whether the acetic acid was taken alone or along with some of the poisonous vegetable alkaloids. To arrive at the solution of these problems, we poured absolute alcohol into the retort which contained the residue of the original distillation. The mixture was slowly and gently heated. The alcohol was scarcely coloured. After filtration and evaporation on a sand-bath, and adding a little water, there only remained a minute quantity of a brown hygroscopic liquid, destitute of any bitter taste, and having the flavour of the juice of meat. It then only remained to be determined whether the matter insoluble in alcohol, remaining in the retort, contained any combination of sulphuric acid and animal matter; the residuum was therefore heated in a reverberatory furnace, and the product of the decomposition contained no sulphite or ammoniacal sulphate.

By repeating these experiments on the contents of the intestines, two scruples more of concentrated acetic acid were procured.

As to the other points of inquiry, we found by analysis—1st. That the black powder found on the person of the deceased was but a coarse mixture of siliceo-calcareous sand and animal black, or bone charcoal. 2. That the stains on her apron were not acid, though they were probably the result of old spots of lemon or orange juice, and that the apron was since washed. 3. The bottle found in the garden contained the superphosphate and sulphate of lime, carbon, and water; in short, it seemed to be the rinsings of liquid blacking.

From the considerations above detailed, it seems to be clearly demonstrated, that she died of the effects of poison, and that the deleterious agent was the acetic acid. Although this acid has not been ranked among poisons up to the present time, it is not the less deleterious on that account; and it has been proved, by one of the reporters, to be capable of inducing, in other animals, pathological lesions of the digestive apparatus analogous to those observed in the subject of the present investigation.

Conclusions.

The preceding facts permit us to conclude,

1st. That concentrated acetic acid is a powerful irritant poison, capable of inducing speedy death, when introduced into the stomach of the dog or the human subject.

2d. That it determines sanguineous extravasation, softening, inflammation, and sometimes perforation, of the membranes of the digestive canal.

3d. That in the majority of cases it produces a black coloration, if not general, at least partial, of the mucous membrane of the stomach and intestines. This colour, which at first sight might be confounded with that produced by sulphuric acid, is the result of the chemical action of the acid on the blood. In fact, by mixing blood on a capsule with concentrated acetic acid, the same tint is speedily occasioned.

4th. That common vinegar, in the dose of from four to five ounces, determines the the same accidents, and the death of middle-sized dogs in the space of from twelve to fifteen hours, unless it has been rejected by vomiting quickly after its ingestion. The same action will probably be exerted in man by somewhat higher doses. Much will of course depend on the state of fulness of the stomach, the dilution of the acid in question, and the quantity consumed.

The mode of detecting acetic acid, in a complicated mixture, is sufficiently explained by the preceding analysis. The treatment of this kind of poisoning will consist in the neutralisation of the acid by magnesia, and subsequently local and general bleeding, baths, demulcents, &c., should form the main therapeutic measures.

CASES ILLUSTRATIVE OF THE

EFFECTS OF IODINE IN SCROFULOUS OPHTHALMIA AND CORYZA.*

CASE 1.

Double Ophthalmia, with Blindness of five months' standing.—Scrofulous Caries in the first stage—cure in five weeks.

Francis Delange, æt. 19, lemonade maker, was admitted into the Hôpital St. Louis, on the 8th October, for ophthalmia, engaging both eyes, and of the most violent description. He was quite blind, but solely

* Troisieme memoire sur l'emploi de l'Iode dans les maladies scrofuleuses. Par J. G. A. Lugol. Paris, 1831.

from mechanical causes, from the thickening of the conjunctiva and cornea, and especially of the eyelids, which were much hypertrophied, and could not be opened. The slightest examination was almost impossible, from the excessive pain and profuse lacrymation occasioned by the light. The inflammatory affection of the eyes prolonged itself into the frontal sinuses and nasal fossæ, producing intense, fascinating headach, with violent coryza, particularly of the right nostril, with incrustations on the pituitary membrane. The present was the third attack of ophthalmia. The first happened when he was 17 years of age, set in in the commencement of winter, and lasted but a few weeks. The second supervened at 19, in March, and lasted eight months. The third, which I have just described, commenced in May, and was consequently of more than five months' duration. The left eye was always much more severely affected than the right. For five months he had a seton in his neck, and two blisters had been applied to his arms at the onset of the attack. Opiate applications of various kinds had been used to the eyes, and ninety leeches had been applied at three intervals. Lastly, he was bled from the arm, since which evacuation he has been quite blind.

Besides the appearance of this ophthalmia, its obstinate nature, and the periodicity observed in its annual returns for three years, the patient still retained palpable traces of previous disease of such a nature as was calculated to elucidate the character of the present affection. At two years of age he had caries of the third phalanx of the left ring finger, and of the lower third of the humerus of the same side. This caries terminated in eighteen months by the loss of the greatest portion of the phalanx, and by the separation of two scales of the arm-bone. Since that time till the commencement of the present illness, he enjoyed extreme good health, and even remarkable muscular power. Five brothers, older than himself, were similarly vigorous.

October 9, 1830. Suppression of the seton and blister; to have local baths; iodurettted injections behind the eyelids and by the inner angle of the eyes, to be repeated frequently every day; to take the iodurettted mineral water (½ gr. of iodine dissolved in a pint of water). After six days of this treatment the patient was evidently convalescent, and he saw clearly with both eyes.

24. Right eye cured; the upper lid of left eye was still red, indurated, and consequently nearly immoveable; on the cornea were seen two spots, each of about two lines in diameter.

Nov. 10. Dismissed cured; the left eye seemingly a little smaller than the right, on account of slight remaining hypertrophy of the upper lid. Though he saw objects distinctly with his eye, his power of vision with it was weaker than at the other side, from a deep-seated corneal stain. The right eye was perfectly well; the headach and coryza disappeared with the ophthalmia. I recommended the patient to continue the use of the iodurettted solution for six weeks after he left the hospital.

CASE 2.

Purulent Scrofulous Ophthalmia in the most violent form, and intense Coryza, mitigated in a few days by active local treatment with Iodine, and finally cured by the internal and local methods.

Antoine Cretonet, ætat. 16, of diminutive stature, entered the Hôpital St. Louis, on the 4th May, 1831, for a double purulent ophthalmia and scrofulous coryza of the worst kind. He kept his head bent down and resting on the chest, and his eyes were covered with a triple bandage, in order to avoid the least contact of the light. On examination we found the eyes bathed in pus, and enlarged to an enormous size by the hypertrophy of their soft parts. The eyelids and their circumference were swollen, of an erysipelatous redness of the worst appearance. Between their free edges there existed a large, red, granulated chord, formed by the conjunctiva, which had already acquired a thickness of three lines.

The swelling of the soft parts, and the exquisite pain occasioned by the contact of the light, although the eye-lids were closed, did not allow us to attempt to open them, in order to examine the cornea. We, however, regretted this the less, as we could only learn by the inspection the *degree* of violence of the disease, by which the nature of the treatment could not be modified.

The nose participated also in the condition of the eyes, and was almost buried in the swelling of the surrounding soft parts. The nasal fossæ were choked with crusts. The alæ nasi hypertrophied, so that the patient was obliged to breathe exclusively through his mouth. Both these affections were of about thirteen months' duration, and their actual state had lasted for eight days. He had previously been affected with ophthalmia several times, had also laboured under obstinate chilblains, and had had favous pustules on the scalp. His father, a man of weakly constitution, had long suffered from ulcerated legs, and was some years dead; his mother died at 40, having ever been of a delicate and sickly habit. Of two brothers and two sisters, one of each died young, the others were in a state of wretched health, subject to chilblains, and constant swellings and incrustations of the nose and pituitary membrane.

The case appearing very urgent on ad-

mission, the acting surgeon applied a blister to the neck, with mustard baths to the feet, and a laxative injection. It is, however, notorious, that this derivative method has failed to cure purulent ophthalmia in the practice of the most renowned physicians. It being also well known that this ophthalmia not unfrequently causes the destruction of the eyes in a few days; and from my conviction that the disease was here of a scrofulous nature, I did not hesitate to have immediate recourse to energetic local treatment with iodine. Wherever scrofula exists, iodine must be called to our assistance.

May 5. Local baths; ioduretted solution to be injected beneath the eye-lids and into the nostrils with a small syringe. As the danger of losing the eyes was imminent, I stationed another patient near Cretenet, to keep the local baths and injections constantly renewed.

7. Pain and suppuration diminished, and the soft parts less impregnated with pus. By slightly opening the eyelids, we found the cornea red and swollen.

10. Swelling of the soft parts much decreased; the patient can open his eyelids and support the day-light. The secretion less abundant, and not so yellow. He remained several hours without a bandage.

16. The swelling disappeared, and disease reduced to the condition of mild ophthalmia.

17. The patient attended my clinical lectures without a bandage, and surprised every one who had seen him three weeks before in the state I have already described.

CASE 3.*

I now arrive at a case in which I may say, without dreading to desert that tone of moderation with which I have constantly related the numerous successes of iodine, that this peculiar treatment has worked a kind of resurrection in the patient.

In the month of last July I was consulted for a young lady, æt. 8, who presented the following symptoms: Intense inflammation, both palpebral and ocular, of the left eye; hypertrophy, lividity of the eyelids, deep red injection of the conjunctiva, hypertrophy of the cornea, which was covered with spots, painful lacrymation induced by the weakest contact of light, so that it was next to impossible to examine the eye.

The lips were indurated, hypertrophied, and livid, beset with crusts and scales, readily bleeding, and painfully restrained in all their motions. The circumference was covered with melitagra, the crusts of which became of the same deep colour as the lips, which were thus affected by two diseases at once, each of which might exist independently of the other.

The skin was dry and hot; the pulse 130; emaciation and debility to the highest degree; invincible repugnance to motion, so that she could not be lifted from her bed, but only to be laid on a couch, whereon she lay motionless, her back to the windows, in order to avoid the least contact of the light with the left eye, which was covered with a bandage. Night and day, whenever a little sleep stole on her, the marasmoid fever redoubled its accession, and her body became bathed in sweat. For more than three months her appetite had vanished so completely, that the most delicate aliments were refused, however affectionately presented. The left lower extremity was shortened two inches and a half by a spontaneous luxation of the thigh, which was but feebly consolidated in the external iliac fossa. But, in other respects, this did not seem to be the central point of the other diseases which we mentioned, for neither fistulous openings, local pain, nor any sign of suppuration, were present. The treatment was composed of the internal use of iodine, and iodine lotions repeated frequently during the day, and ioduretted baths.

By the end of one month's treatment, the young patient was able to get up daily; the appetite had already re-appeared, nutrition took on the most happy activity, the limbs became covered with a healthy tegumentary envelope, beneath which a layer of well-formed adipose cellular tissue was felt to exist. The general health is now entirely re-established.

The lips are entirely free from melitagra, and there only remain slight induration and hypertrophy in the middle of the free edge of the upper lip. The commissures are clean and free in all their movements.

The left eye is now but very slightly inflamed, and sufficiently able to endure the impression of daylight, for the infant plays all day in the open air with no other defence than a violet-coloured screen.

According to my experience, before I used the ioduretted baths, I could not doubt but that, in this case, the prompt amelioration which took place was greatly attributable to their operation. We may presume this the more reasonably, as the child being pleased with the baths, after she increased in strength, I gave her at first three, then four a week, and eventually I brought them to two every three days during October and November.

I might multiply still further histories of particular cases I have witnessed, but those which I have just related appear to me sufficient to engage practitioners to adopt this new mode of treating scrofulous diseases.

* Memoire sur l'Emploi des Bains Iodurés, &c. Par J. G. A. Legal. Paris, 1830.

THE LANCET.

London, Saturday, September 3, 1831.

HAVING, we trust, not improperly, introduced Mr. PATTISON to the notice of our readers in the last LANCET, we shall now, *sans ceremonie*, proceed to examine his "Statement of the facts of his connexion with the UNIVERSITY OF LONDON."

In the first page Mr. PATTISON informs his readers that—

"When he became a candidate for the chair of anatomy in the UNIVERSITY OF LONDON, he occupied a similar professorship in the University of Maryland, from which he derived, with the practice of his profession, an income of about 2000*l.* per annum. It was (says Mr. Pattison) an income which was rapidly improving, as the number of pupils increased, during the five years I was connected with that institution, from seventy to about three hundred; and the last year I lectured in the University of Maryland there were added to the school about sixty medical pupils. I mention this fact (these facts) to prove, that in engaging in the service of the University of London I made a great sacrifice, and that I could only have been induced to do so by the very flattering representations which were held out by the Council as to the emoluments and honour to be obtained by a connexion with the University over which they presided—expectations which, I believe, would have been fully realized had its affairs been properly administered."

Without intending to offer the slightest offence to Mr. PATTISON, we must say, that a disappointed schoolboy could scarcely refrain from laughing at such a "statement," even had it proceeded from the least self-sufficient and bombastic of his chagrined companions. If Mr. PATTISON obtained so much renown, and such an exceedingly handsome pecuniary reward in the University of Maryland, why did he withdraw from it? "Why?" says Mr. PATTISON, "Because I was induced to do so by the very flattering representations which were held out by the council as to the *emoluments* and *honour* which were to be obtained by a connexion with the University over which they presided."

A reply of this character reflects little honour on the writer, for the motive which induced Mr. PATTISON to connect himself with the LONDON UNIVERSITY appears to have been one of pure selfishness, and he is besides uncandid, inasmuch as such a declaration might induce a large number of persons to believe that representations of a peculiarly private nature, had been made individually to Mr. PATTISON, and that accordingly, with a view to serve the English public—with a view to show his kind disposition towards the students of anatomy in England, he had, owing to the weight of those private "flattering representations," quitted an office worth upwards of 2000*l.* per annum, which he had held with such eclat in Maryland. "*Sacrifice!*" What a monstrous absurdity! We are astonished that a man possessing common every-day capacity should employ such a term in "connexion" with a transaction which, according to his own acknowledgment, he regarded as nothing more than an affair of pounds, shillings, and pence. If there were any "sacrifice" on the occasion, the students of the University of Maryland might, with some show of reason and justice, have complained that *they* had been offered up at the shrine of selfishness; for it were idle to suppose that Mr. PATTISON'S Glasgow reputation, unaided by the high-sounding title of "Professor of Anatomy in the University of Maryland," would have obtained for him the Chair of Anatomy in the UNIVERSITY OF LONDON. The circumstances under which he retired from the Scottish city were extraordinary, and as unfortunate as they were peculiar. In admitting, therefore, that Mr. PATTISON'S talents and perseverance may have done much for him in America, it cannot at the same time be denied, that the bold and manly conduct displayed by the heads of the transatlantic University, in placing Mr. PATTISON in such a high office in their institution, must have had great weight with the Council of the LONDON UNIVERSITY,

whilst they were engaged in the examination of Mr. PATTISON's credentials. "Sacrifice!" Can any-thing be more contemptible than to employ such a term! If Mr. PATTISON had complained that the Council had not sufficiently rewarded him for the pain he had suffered from his ingratitude to his friends and supporters in the University of Maryland, few critics would have been inclined to condemn such a characteristic mode of expression, and his candour would not have been the less appreciated, for at the same time distinctly declaring that he had made a bad pecuniary bargain in transferring himself from the American to the English University. It were idle, then, in the extreme, to talk of making a "sacrifice," when there is an unequivocal acknowledgment, that in engaging in the service of the UNIVERSITY OF LONDON, he was induced to do so from the "very flattering representations which were held out by the Council, as to the *emoluments* and honour to be obtained from a connexion with the institution over which they presided." The only "sacrifice" made by Mr. PATTISON was, that which men always make when they buy and sell, or engage in barter—he gave up one possession, in which he had an interest, to obtain another, in which he *thought* he should acquire a greater interest. What should we say of a gentleman who, having entered upon a speculation by purchasing an estate, should afterwards tell us, when he found that he had paid too dearly for it, that he had "made a great sacrifice" by leaving another estate in order to occupy his new possession? Mr. PATTISON was in London when the prospectus of the University was first issued; he was sufficiently advised of all the prospects of the institution, and calculating upon the chances of its success, he hesitated not to prefer the exchange, of what he alleges had been his *positive* income in the University of Maryland, for what might be his *possible* income in the UNIVERSITY OF LONDON. How childish is it, then, for the author of the "Statement" to contend that he made any voluntary "sacrifice" with a view to promote the interests of the newly-established institution!

But when Mr. PATTISON speaks of having been "induced" to join the University by the "*flattering representations*" of the Council, and when he couples that inducement with his ill-endured "sacrifice," ought he not, in fairness to the Council, to communicate to the public what were the "flattering representations" really made to him? The allegation contains a charge prejudicial to the character of the gentlemen whose conduct Mr. PATTISON impugns; in candour, therefore, either the evidence upon which that charge is founded, should be laid before the public, or, in the absence of proof, certainly no accusation should have been advanced. Probably we go a step too far in using the word "accusation," but the term employed by Mr. PATTISON would very obviously imply that he had been *deluded* by the high-coloured or deceptive "representations" of the Council.

Many are the persons who believed, until the appearance of the last week's LANCET, that Mr. PATTISON had been *solicited* by the Council to become a candidate for the chair of anatomy—that he had been earnestly and assiduously wooed by them, and that the divorce from the sister institution of Maryland was the result of the "flattering representations" arising from the prospect of a connexion with the fair daughter of Science then about to make her appearance in the British metropolis. But how the public can have been seduced into such a belief it is not possible to conjecture, for neither Mr. PATTISON nor his friends have yet had the temerity to assert, that any private or individual application was made to him, or, in fact, that the *prospectus* issued by the Council came into his hands otherwise than it came into those of thousands of other persons. If, therefore,

he cannot allege with truth, that any individual *private* application were made to him, is it, we ask, fair to complain of having been "*induced* to engage in the *service* of the University by the *very flattering representations* of the Council," and that in yielding to their solicitations for the union he had "made a great sacrifice?" Mr. PATTISON, it would seem, relinquished no advantage that he enjoyed, without cherishing the hope of obtaining something *better*. Unhappily, as is not unfrequently the case, the persons most deeply interested in the union discovered, when too late, that they had made a bad bargain, and that very few, if any, advantages, would be the issue of the connexion. Mr. PATTISON liked not the Council, and the Council liked not Mr. PATTISON; hence a separation was unavoidable.

After dwelling on the "very particular circumstances of his election," but without noticing the very particular majority of *one*, Mr. PATTISON adverts, in a tone of apparent exultation, to the testimonials which he laid before the Council, the value of which, he complains, has not been sufficiently appreciated by one of his late colleagues.

"I rest, however," says Mr. PATTISON, "the value of my testimonials, not on the opinions, but on the facts which they establish, which are—

"1. Having commenced teaching anatomy and surgery in Glasgow, the *attractions of my manner, and the extent of my reputation, were such*, that I was obliged, although my theatre was a large one, to refuse, every year I lectured in Scotland, applications for tickets of admission, from there not being room to accommodate all the applicants.

"2. Having been invited to go to the United States to occupy the chair of anatomy in the University of Pennsylvania, I found, on my arrival in that country, that, not expecting me to come, the chair had been already filled. I was, therefore, under the necessity of commencing lectures on anatomy and surgery in Philadelphia, where the University is situated, as a private lecturer; yet, under all the disadvantages to which a stranger is necessarily subjected, and although every impediment to my success was opposed by the professors of the University, I succeeded in obtaining a class of above one hundred and ninety students. Not only thus; the celebrity of my lectures induced the University of Maryland to send a deputation of the Regents of that institution to request me to accept of a professorship in their University.

"3. My success as a teacher of anatomy and surgery in Baltimore will be best shown by the following extract from a letter written by a distinguished physician of that city: 'But it fortunately happens that the high qualifications of Professor PATTISON, as a teacher of anatomy and surgery, do not rest alone on what, perhaps, some may deem the partial testimony of his friends. The sudden and rapid increase of the University of Maryland presents a noble and unquestionable monument of his abilities and success in these respects. At the time he became connected with it, in the year 1820, the institution exhibited the most gloomy aspect: the number of pupils was small, not exceeding seventy or eighty; the buildings were dilapidated, the University overwhelmed with debt, and it was surrounded by formidable rivals, animated by every motive to exertion. It now presents a picture entirely the reverse. The number of pupils during the winter exceeded three hundred; the buildings have been greatly extended, and rendered elegant and convenient, so that, in these respects, they will compare not unfavourably with any institution in the world; its pecuniary embarrassments have been entirely relieved, and its finances are at present in the most flourishing condition. I will not undertake to assert that this surprising revolution is *solely* attributable to the talents and exertions of Professor PATTISON; but that his attractions as a public teacher of anatomy and surgery, and the energy of his character, which will not suffer him to confine himself to the mere duties of the lecture-room, are among the principal and most efficient causes, is a fact of public notoriety, and would, I believe, be universally admitted.'"

Such are the facts which Mr. PATTISON tells us his testimonials have established, and, considered altogether, strange facts they are; but Mr. PATTISON himself is not a whit less strange. Paragraphs, marked 2 and 3, we have copied verbatim, and from paragraph 1 there are omitted only a few words relating to Dr. JEFFREY, his celebrated rival in the University of Glasgow. The reader cannot fail to perceive how instantaneously Mr. PATTISON appears to have slipped from the University of Glasgow to the University of Pennsylvania, but not from

one professor's *chair* into another; for, when he reached Pennsylvania, "not being expected," the chair which he had been "invited" to fill was already occupied. We find Mr. PATTISON ever pursuing the same course; it is a course, however, which embraces two extremes—the splendour of triumph, and the misery of discontent. Reader, mark the progress of this gentleman, and say if you cannot observe in it, according to Mr. PATTISON's own showing, two or three circumstances leading to a strong conviction that the Council of the LONDON UNIVERSITY may have been induced to remove Mr. PATTISON from his chair, without being incited to such a step by a "cabal," or by the "intrigues of professors and students." Mr. PATTISON has always been pre-eminently successful, but ever changing his quarters. When he lectured in Scotland, the "attractions of his manner, and the extent of his reputation, were such, that he was obliged to refuse, every year he lectured in Scotland, applications for tickets of admission, from there not being room, although his theatre was a large one, to accommodate all the applicants." What could be more gratifying to a zealous lecturer, than to have his exertions thus rewarded? But the triumph was not adequate to the capacity of Mr. PATTISON's spirit of enterprise. Accordingly he informs the English public, that "having been invited to go to the United States (by the way he has forgotten to state by whom the invitation was given) to occupy the chair of anatomy in the University of Pennsylvania, he found, on his arrival in that country, that, "not expecting him to come, the chair had been already filled." Nothing daunted, however, he says he was "under the *necessity* of commencing lectures on anatomy and surgery in Philadelphia, where the University is situated, as a private lecturer." Why this gentleman was under the "necessity" of lecturing there at *all*, we are entirely at a loss to conjecture; nor is the difficulty lessened by recollecting that Mr. PATTISON had only just before informed us that the "attractions of his manner and the extent of his reputation were such" in Glasgow, that his theatre, although a large one, would not contain the admiring and wondering students who annually assembled in that University to be gratified and enlightened by his eloquence. If Jonathan *were* so rude as to place another in the seat which he had "invited" Mr. PATTISON to fill, "we guess" it would have been far more prudent in that gentleman to have shaped his course back for Scotland; that is, presuming Mr. PATTISON's facts to be correctly represented, for certes a chair occupied in a theatre overflowing with students, in one's native land, is a prize of higher worth than a chair pre-occupied in a foreign university. But Mr. PATTISON, in his Quixotic search after "chairs" and universities, scorned to be obstructed by trifles, and as the rude authorities of the American University had placed a native professor in the chair of anatomy, Mr. PATTISON, with characteristic boldness and zeal, resolved forthwith that Jonathan should sit upon thorns. So strong was the impulse to rivalry, that Mr. PATTISON was "under the *necessity*" of commencing as a private teacher, and so winning were the "attractions of his manner," and so imposing the "extent of his reputation," "I succeeded," says he, "in obtaining a class of one hundred and ninety students;" when instantly away he posts, on receiving *another* invitation, to the University of Maryland, where his success, according to the testimony of the "distinguished physician," had the effect of renovating the dilapidated walls of the University; pupils out of number flocked to the theatre, and the picture of the institution became the very reverse of gloom and despondency—its characteristics before the fortunate arrival of the Scottish professor of anatomy. What next? Why we find that Mr. PATTISON left this most flourishing of all medical

schools, and became an humble supplicant in London for the chair of anatomy in a newly-projected institution.

Thus, from Glasgow, where he had a theatre overflowing with students, he embarked for a chair of anatomy in the University of Pennsylvania; disappointed of that by the rudeness of Jonathan, he then sat himself down as a private teacher, and succeeded in collecting a class of a hundred and ninety students. At the sound of another "invitation" he flew off to Maryland, where, by his celebrity as a teacher, and his success as a practitioner, he quickly acquired an income of upwards of 2000*l.* per annum, and soon afterwards, sad reverse of fortune! we find him discarded as an unpopular lecturer from the UNIVERSITY OF LONDON.

Now, as there is no getting over these facts, Mr. PATTISON should be one of the last persons in the world to talk of the "sacrifice" which he made in "engaging in the service of the UNIVERSITY OF LONDON." Might not the *students* of the flourishing schools, which he left from time to time, with much greater reason complain of *their* having been "sacrificed" at the shrine of Mr. PATTISON'S *penchant* for "increased emoluments;" for it would appear, from his own acknowledgment, that he gave up his overflowing school at Glasgow, because he thought he was invited to a *better thing* in the University of Pennsylvania; he again gave up his private class of upwards of a hundred and ninety students, because he was invited to what he considered a *better thing* in the University of Maryland, where he again gave up a professorial chair, because he was "induced, by the flattering representations" of the Council, to take what he considered to be a *still better thing* in the UNIVERSITY OF LONDON. We shall not say that it was so, but the course of conduct pursued by Mr. PATTISON would almost justify us in stating, that he has on all occasions made the shoulders of his students the stepping-stones to his eminence, for when he boasts of the success of his school, that boast is ever and anon accompanied by an announcement, that he had quitted that school to take a chair in another. Having pushed his own interests with such an apparent disregard of the interests of others, Mr. PATTISON, without any infraction of the rules of propriety, might, we think, have spoken with somewhat more hesitation respecting the "*sacrifice*" which he made in becoming a candidate for the chair of anatomy in the University of this metropolis. Appearances are exceedingly deceptive if Mr. PATTISON would volunteer to make a very heavy pecuniary "sacrifice" for the promotion of any interest except his own. What must have been the feelings of the poor students in Glasgow, Pennsylvania, and Baltimore, on finding that they were so suddenly forsaken by a lecturer, "the attractions of whose manner and the extent of whose reputation" had induced them to fee him for instruction? Did they not feel on Mr. PATTISON'S departure, that *they* had been "sacrificed?" for it is not to be credited that the Professor had perfected the education of all his students before he had quitted each of the Universities in question. Nay, it is quite evident that, when he left Maryland, it was not known then that he would become even a *candidate* for the chair of anatomy in the English University. Those students, therefore, who, in the session previous to Mr. PATTISON'S departure, had entered as "perpetual" pupils to his class, heard the lectures of a single session only. We say, then, with truth, that appearances are exceedingly against Mr. PATTISON up to the period when he joined the LONDON UNIVERSITY, and that they are of a character to justify no man in believing that Mr. PATTISON would make a great pecuniary "sacrifice" with a view to benefit the Council, or any person—except himself. Having so easily disposed of his Scotch and American

students—having raised them with the facility of so many hot-bed crops of mushrooms, he would seem to have swept them off as unceremoniously as fungi, rather than permit them to obstruct his course if he were led on, in his migratory pursuit after new "chairs," by the "flattering representations" of the heads of some newly-projected institution. But once seated in the UNIVERSITY OF LONDON, Mr. PATTISON discovered that in English students who had arrived at the age of manhood, he had not mushrooms to deal with—that he had not inexperienced "boys," with whose interests he might trifle and sport, but a body of intelligent and spirited gentlemen, who had sense enough to know that a sacred and solemn contract had been entered into between their professor and themselves, and that whilst they felt bound to yield obedience to the lawful mandates of the Council of the University, they firmly resolved to receive, in return for their fees, instruction of a first-rate character from the Professor occupying the chair of anatomy. Urged by what they deemed their interests, the medical students of the UNIVERSITY OF LONDON determined to rid *themselves* of Mr. PATTISON, as Mr. PATTISON had before ridded *himself* of the students of Glasgow, Pennsylvania, and Maryland. Mr. PATTISON doubtless was governed by *his* "interests," in leaving the three Universities just named;—the English students, doubtless, were stimulated by *their* interests when they desired that Mr. PATTISON should be removed from his place in the UNIVERSITY OF LONDON. Out then upon the paltry bathos about having made a great "*sacrifice*" to engage in the service of the Council!

Here we must break off for the present, as we have not space to do justice to the subject in this number. In truth we have only yet reached the third page of Mr. PATTISON'S pamphlet, and the most important feature of even that page is still left untouched—namely, Mr. PATTISON'S *first grievance*." Pray, what think you, gentle reader, constitutes this "first grievance?" Mark you well the description of it, which we must allow Mr. PATTISON to supply in his own words:—

"The first GRIEVANCE to which I shall advert, is that of the appointment of the late Mr. BENNETT to the situation which he occupied—one unheard of in any other medical institution in Europe, and one, the necessary operation of which must have been apparent—viz. to create an officer whose duties intimately associated him with the pupils, and whose *interest* it was to elevate himself by bringing the talents and the reputation of the professor into disrepute with his students. The appointment of that gentleman was not even hinted at, until nearly a year after my election had taken place; and the Council must admit, that before they decided on it, they were fully warned of the injurious influence which it would necessarily exert on MY *interests*, and on the harmony and prosperity of the medical school."

The appointment of Mr. BENNETT to the office of demonstrator a "GRIEVANCE!"—not because Mr. BENNETT was an inexperienced teacher—not because he was an incompetent anatomist——not because he lacked zeal in the performance of his important labours, but, hear it, ye powers! because "his duties intimately associated him with the pupils," and because "it was the *interest* of the demonstrator to elevate himself by bringing the talents and the reputation of the professor into disrepute with his students!" Here we have an acknowledgment that the gentleman who was professor of anatomy, and also professor of surgery in the same institution, entered upon the duties of his office in dread of the "attractions of the manner" and the "extent of the reputation" *of* his demonstrator. Now as there is no evidence to prove that Mr. BENNETT commenced *his* duties with any unfriendly feeling towards Mr. PATTISON—indeed the Professor does not even hint at such a circumstance—what are we to infer? Why, that the spirit of "intrigue" "first raged" in

the bosom of the *Professor*, and not in that of the *Demonstrator*. Mr. PATTISON entered upon his duties, then, with the feelings of an "aggrieved" man—with the feelings of a "jealous" man—with the eyes of an individual, who saw in the demonstrator, his rival, the destroyer of his pecuniary "interests." Oh! how cruel, then, is it to attribute to Mr. BENNETT the existence of those pitiable feelings of sordid jealousy which were cherished only in a totally different quarter! We say, fearlessly, that a Professor of anatomy and surgery who can stand in dread of the talents and exertions of his Demonstrator is decidedly unworthy of the protection of the Council, and the attention of the students. What is the meaning of Mr. PATTISON's argument? Simply this: that as the Council had appointed an incompetent professor to the two chairs of anatomy and surgery, it was their duty to select an incompetent person for the single office of demonstrator, in order that the defects of the lecturer might not be exposed—in order that *his* "*interests*" might not be obstructed, and that he might not be ousted from his two chairs by the "elevation" of a gentleman of superior talents. In a word, he would have us believe that it was the duty of the Council to have selected a *tool* for the convenience of the professor, rather than a man of great talent for the instruction of the students—that the *Demonstrator* should have been a kind of sponge to absorb the filth of the dissecting-room, in order that the *Professor* might always appear in the full splendour of unsoiled robes—he was anxious to preserve the attractions of his brass ornaments, by carefully excluding from the observation of the students the brighter polish of all superior metals.

The appointment of such an anatomist as Mr. BENNETT to the office of Demonstrator a "GRIEVANCE"! and the man who could harbour such a thought to assert that he has been the victim of a cabal!

The whole subject is exceedingly irksome to us, and we shall endeavour to dismiss it in the next LANCET.

BOARD OF HEALTH.

PRELIMINARY STEPS ADVISED TO BE TAKEN ON THE FIRST APPEARANCE OF CHOLERA.

It is of great importance that each town or village, particularly those on the coast, should be prepared with the best-arranged means to meet such a calamity as the breaking out of the disease now raging in the North of Europe, so as to prevent confusion upon the emergency of the moment, and be ready to act upon a well-considered system for preventing the spreading of infection.

With this view the Board recommends the formation of a local board of health at each place, to consist of the chief magistrate, the clergyman, one or more medical gentlemen, and two or three of the principal inhabitants, who may immediately, and as occasion requires, correspond with the Board of Health in London, the medical members of the local boards being deputed to write upon all subjects relating to any symptoms of the disease.

The best means of preventing the spreading of infection are, the immediate separation of the uninfected from the sick, by their prompt removal from the house of any infected person, or by the removal of any individual affected with the disease, if possible, to some house in a dry and airy situation appropriated to the purpose; but in the event of such removal not being practicable, on account of extreme illness or otherwise, the prevention of all intercourse with the sick, even of the family of the person attacked, must be rigidly observed, unless the individuals who desire to stay shall submit to such strict rules of quarantine as the public safety may demand, and the local Board of Health, advising with the Board of Health in London, may consider expedient.

As success in the treatment of this disease, and preventing it spreading, have been found greatly to depend upon *early* medical assistance, it is of great importance that the heads of families and others should be vigilant in guarding against concealment or delay in making known every case which may occur.

On the removal of diseased persons, the rooms they may have inhabited, and the house generally, should be thoroughly exposed to a constant current of air, and recourse had to all the well-known means of purifying houses, particularly the use of

chloride of lime; and the bedding and clothing of the sick person, after removal, should be soaked in a slight solution of the chloride in water, and well washed. It is impossible that ventilation and cleanliness can be carried too far in the houses of the sick after removal; whitewashing, and a variety of means of effecting so important an object, will no doubt occur to the local Boards of Health, and a continuance of ventilation for some days, as the best means of preventing contagion.

In large towns the local Board of Health should be composed of sufficient numbers to admit of subdivision into district committees, always attaching to each committee at least one medical gentleman.

For the information of the public, and to secure a ready and instant reference to authorized persons, the names and residence of the persons composing the local Boards of Health should be placed on the church door.

In the event of so great a calamity falling upon this country as the introduction of this disease, rules and regulations upon an extensive scale, suited to the rigid system of quarantine which such an event would demand, will be immediately circulated by the Lords of his Majesty's Most Honourable Privy Council, who will, upon the earliest intimation of the existence of the disease, send down a medical practitioner, who has been acquainted with the disease as it occurred in India.

In the name of the Board,
HENRY HALFORD, President.

ON THE

THEORY OF THE NON-IDENTITY

OF THE

NERVOUS AND ELECTRICAL FLUIDS

AND THE FUNCTIONS OF THE GANGLIA OF THE SYMPATHETIC.

By GEORGE DARBY DERMOTT, Esq., *Lecturer on Anatomy and Physiology.*

I THINK that the presence of vessels or organisation in a living substance, whether animal or vegetable, is not absolutely necessary for its vitality; that vitality innately exists in the particles of organic matter of some parts of our body and of vegetables, without vessels. This opinion, if thought worthy of attention, I am inclined to call the *Atomic Theory of Life*, to distinguish it from that diametrically opposite, but vague, and most certainly erroneous, theory of the existence of vessels (vasa vasorum) *ad infinitum*. The following remarks will perhaps contribute to justify this theory.

There are some permanent structures which possess life, apparently not vascular, as the crystalline lens, evidently fibrous; and the cornea, possibly not vascular.

This non-vascularity is not confined to some few living structures; but we have life existing in non-vascular substances which are not regular structures, and some of these are even fluids, as the blood, coagulable lymph, and the jelly of the embryo, the aqueous and vitreous humours may also, perhaps, contain some degree of vitality. The blood is the great magazine of vitality to the whole body. The coagulation of coagulable lymph, when effused, is an act of the vitality contained in it; its formation into fibres is an act of its vitality; its becoming vascular, or the generation of vessels in it, is an act of its vitality, quite as much as the deposition of substance in an already organised part, is an act of vitality. The jelly of the embryo is inspissated, rendered fibrous and organised by the agency of the vital principle in it. I regard the circulation in a living part as being, subsequently to vitality having *once* formed organisation in the part, a vehicle for conveying and imparting vitality to different parts so as to support their vitality.

Taking vascularity to be the basis of most organised parts, *the elementary particles of an organized substance cannot be organised*: were that the case vasa vasorum would exist to an infinite degree, for however small the vessels, still vasa vasorum must necessarily appertain to them as vasa vasorum. On the contrary, I presume that vitality is innate in each elementary particle of a living body, and of course in the elementary atoms of the *minutest* vessels; for these vessels, the capillaries, can have no minuter vessels (vasa vasorum) supplying them, and their coats must consequently possess vitality in some other way than by an ordinary circulation of blood within them.

Each elementary atom of nervous substance within the neuralema sheath of the nerve (as well as the sheath itself) must be alive, possessing the distinguishing living properties of nervous substance, consequently possessing the living principle; yet we cannot believe that each atom is supplied by nourishing vessels in its own substance, for the nourishing vessels are not in the true nervous substance of the nerve, but in the neuralema sheaths, the nervous substance being a deposit in the sheaths, and consequently both the nervous substance, and the vitality in that nervous substance, are produced from the vessels in the neuralema and pia mater, constituting the vascularity of the nerves and brain. And even if the actual existence of nourishing vessels in nervous substance were established, it would be ab-

surd to suppose the existence of vasa vasorum to those vessels *ad infinitum*. The same, I believe, may be said of the substance of muscular fibre, in reference to its cellular membrane.

We have a right to draw a strict analogy between the circulating vessels in vegetables, and the minutest class of the same in animals; for whether in one or the other, life is life. The vessels, then, circulating the sap in vegetables are not apparently supplied with vasa vasorum, yet they are alive, and it would be folly to suppose that the sap circulates by mere capillary attraction; it would, in fact, be reducing the whole substance of the plant to mere dead matter; the circulation of the sap, the digestion or formation of the sap in the root, the respiration of the leaves, and the various secretions of a plant, as well as the deposition or secretion of fresh substance from its sap, producing its growth, are all living actions of the plant; and to say that the vessels of a plant have not a living agency in circulating the sap, is to deny them life—or, at least, is denying to a living structure a living function, yet I believe these vessels are not known to have vasa vasorum. Perhaps the action of the circulating vessels of plants may be resembled to the living organs possessed by some orifices in our bodies, as the puncta lachrymalia of the eyelids, and I believe this to be muscular action. It would be as great a degree of madness to deny a vital agency to the vessels of a plant (its organisation), as to deny vitality to the whole of it, or to deny vitality to polypi (substances, in some respects, half vegetable and half animal), which not only possess, in a greater degree than plants, organic irritability, but contractility, and therefore I would venture to conjecture muscular fibre, as well as the elements of a nervous system, the proximate seat of its sensibility. I believe also that plants may contain, throughout their substance, granules of something analogous to a nervous substance in animals, for true it is that their vessels are in a degree sensible to the stimulus of their contents, as well as to that of other stimuli. Again, the sensitive plant seems not only to possess, like other plants, organic irritability, produced and supported by its vessels, but, like the polypus, the power of contractility in external organs, an effect of a peculiarity of structure (probably muscular) connected with organic irritability. I believe where there is organic action there is muscular (that is to say, contractile) fibre, and where there is muscular fibre there is organic action.

But to return to the nature of the vital principle, we have it certainly existing in the blood, and I believe it to be a material principle ("materia vitæ"), and the cause of the blood's stimulating power. Whether it exist as an invisible fluid in its different states and combinations with different structures, whether this fluid be volatile, and whether, at the cessation of organic action, it become resolved and dispersed into its elementary chemical constituents, like dead organic matter itself, I will not pretend to say, but that this vital principle is evolved from the blood seems evident; probably this is effected not only by its being permeable in organic substance like heat, but by its being separated from the blood in the form of an invisible secretion, produced by arteries organising any structure. This vital principle seems not only by its peculiar stimulus to stimulate the arteries of all structures through which it circulates, but to be the proximate cause of their being susceptible to their stimuli, whereby it gives to all living parts a *susceptibility to be stimulated*, two properties of the living principle distinguishable in all living structures, whereby the vessels of all living structures are kept in action, and vitality is the cause of its own dissemination throughout the frame.

The increase of vitality, whilst the bulk of the body increases, must, I think, depend upon secretion, or some functional action; some stimulus being, at the same time, the exciting cause of this organic action, which produces the generation or increase of vitality, as perhaps the stimulus of the air in respiration may be the exciting cause (by some peculiar organic action taking place) of the generation of a fresh supply of vitality within the lungs; and thus perhaps we may regard the lungs (operating upon the nutritious chyle received into the circulation from the alimentary canal, and excited into this operation by the stimulus of the atmospheric air) as the primary source of vitality,* just as the stimulus in the ovum produced by the semen and the excitement of the uterine system during coition, is the exciting cause of impregnation, and of the commencement of that continued chain of organic actions in the living jelly of the embryo, whereby the future structures of the frame are built up, and, subsequently, called individually and collectively into living action, as well as perhaps the exciting cause of an increased production of the vital principle in a ratio as the fœtus grows. And this vitality will continue as long as the circulation and secretion continue, and once having begun to exist, has the power

* "And God formed man of the dust of the ground" (this refers to the organic creation of man), "and breathed into his nostrils the breath of life" (referring to the manner in which that organisation was endued, and is now endued, with vitality), "and man became a living soul" (an existence capable of being continued in a future world).

of generating or increasing itself, upon the application of proper stimulants, these stimulants exciting the peculiar functional actions necessary for its production.

This principle thus inherently pervading a structure, can, I believe, be communicated in a certain degree, to another contiguous part (provided that contiguous part, or substance, is naturally adapted to accept of life, even if that part contiguous should not happen to be vascular), whereby the vitality of a contiguous, not vascular part, may be kept up; the vital principle being eliminated and imparted to it from the capillaries of the surrounding or contiguous vascular substance. In this way I can account for the vitality of the crystalline lens. Coagulable lymph, extravasated in the urine within the urinary bladder, and floating in it, consequently not in contact with the internal surface of the bladder, coagulates; and this coagulation, an act of vitality, in the dying set, under the above-named circumstances, of the coagulable lymph, for in coagulating it dies, and does not become organised. But if this coagulable lymph, instead of floating in, and being separated by, an excrementitious secretion from the living internal surface of the membrane which produced it, remained on the surface of that membrane, then, after coagulating, it still retains the principle of vitality, owing probably to vitality being communicated to it from the contiguous structure (whereby a certain supply is kept up in it), and by thus still retaining in itself, or having supplied to it, the vital principle, it becomes organised; and owing also to an affinity of life existing between the vessels of the membrane and the vessels of the coagulable lymph, the vessels of the two become united. Thus coagulable lymph in contact with the producing membrane, generally becomes organised. By admitting of this affinity of life between two contiguous living structures, we can account for "sympathy of contiguity"—why, when there is an inflamed convolution of intestine, we find the part of the peritoneal lining of the abdomen which happens to be in contact with it, also inflamed, and why these two contiguous surfaces so frequently, organically, and vitally, unite.

I deem it *possible*, that as all secretions are the product of life, they may all (perhaps excluding the excrementitious) retain some vitality, as long as they remain in contact with the living surfaces which produced them. However this may be, coagulable lymph or fibrin, in all its states, combinations, and structures, seems to be the natural aidus of the materia vitæ; this substance forms the general basis of all the structures of our frame; and there is evidently a very close analogy, almost amounting to an identity, between coagulated fibrin and muscular fibre. I believe one principal use of the serum in the blood, is for the purpose of sufficiently diluting the stimulating materia vitæ in the crassamentum, as nitrogen gas dilutes the oxygen in atmospheric air.

Whether this living principle thrown out of the circulation into living structures, as a secretion or what not, exists in different modifications in different structures, its nature being modified by the peculiarity of the structure which produced it, or in which it became developed; or whether it exists exactly the same, without modification, in all structures, *certain* properties being developed in *certain* structures, owing to those structures being naturally and specifically adapted, by their arrangement and by the substances composing them, for the development of only one or some characteristic few, of the numerous specific properties of the vital principle, and not for the rest, I will not pretend to determine; but true it is that, from one cause or the other, the vital principle distinguishes itself in various structures by various properties,—as in the nerves, by sensibility, and being the vehicle of the will—in the muscles, by contraction—in the blood, by its stimulating organic parts—in coagulable lymph, by its coagulation, contraction, and by its becoming vascular—in the thoracic and abdominal viscera, by their various specific secretions and functions—in the brain, by certain functions, all equally wonderful, and never to have been preconceived or understood by man, aided only by the principles and qualities existing in dead matter. On the contrary, the agency of vitality either resists altogether, or very considerably modifies or checks, the operation of all those agents governing and distinguishing the nature of dead matter; so that the *full and co-operative* development of the laws of dead and living matter in, I believe, incompatible.

(To be continued.)

CASE OF IMPERFORATE ANUS.

By JOHN THOMAS, *Esq., Surgeon.*

With the impression that curious and interesting cases pass under the observation of other practitioners beside those connected with the wards of an hospital, and that such instances are equally deserving of record in your excellent Journal, I have herewith sent you a brief account of one of nature's freaks for that purpose. It may be

interesting to some of your curious readers. Allow me to observe *en passant*, that medical practitioners would confer great benefit on the profession, were they to publish the results of their experience from time to time in the pages of your Journal, which, of all other periodicals, appears to be most extensively circulated. Let them not urge want of time as an excuse; there is no practitioner, however extensive his practice, who may not, if he will, find abundance of opportunity for such a laudable and self-improving pastime—a very *otium cum dignitate*.

CASE.

On Wednesday, 17th of August, an infant of two days old was brought to me for advice with the following symptoms:—From the hour of its birth it had derived no nourishment from the mother, who had experienced an excellent time, and was attended by a practitioner of Sir Anthony Carlisle's approval—namely, *a woman*. During the two days it had no alvine or urinal discharges; its abdomen, which at birth was natural, became exceedingly distended, and, in the epigastric region, an elevation, about the size of an egg, was plainly discernible along the course of the transverse portion of the colon; the bilious secretion, sometimes as yellow as gold, and at others as green as grass, was continually ejected from the stomach, and the infant by its constant cries seemed to experience much pain. This, I suspect, was not a little augmented by the remedial agents employed with the best intentions certainly, but with a lack of that judgment so essential for the treatment of the case, and which one would scarcely expect to find in a *sage-femme*. This learned practitioner, whose "order" we are taught to believe would be an admirable substitute for those members of the profession who defile themselves with the practice of midwifery, administered magnesia, castor oil, rhubarb, and whatever else, in her opinion, was likely to relieve the obstinate constipation, but to no purpose; in consequence whereof she applied to me for assistance. Upon examination I found the anal aperture of a natural appearance externally, but on attempting to pass up a blunt probe, an obstruction resisted its introduction. Suspecting the impediment might be simply a marginal adhesion of the rectum, which a perforation and subsequent dilatation might permanently overcome, I carried the point of a bistoury about two lines up. Having done this, I easily introduced the end of a bougie about the size of a quill, which, without the least force on my part, slided in about an inch. I was, however, rather surprised to find no trace of meconium on the bougie, and I began to suspect that the rectum could not yet have been intromitted. On gently pressing the bougie forward, a small quantity of urine escaped. Day after day elapsed, the bilious vomitings continued, but still no evacuation, and on the seventh day the child died. Without the least hesitation, the mother consented to a post-mortem examination, the results of which I shall proceed now to lay before your readers.

Upon making a perpendicular incision from the ensiform cartilage to the pubis, which I bisected through the centre by another in a transverse direction, and reflecting the flaps, the abdominal contents were fully exposed. At first sight, the most remarkable appearance was the immense size of the colon from the fossa iliaca dextra to the end of the great gut, the rectum included. The sigmoid flexure was obliterated, its coats highly injected and discoloured, its parietes exceedingly distended, and the calibre of its tranverse portion measured nearly two inches. On exposing the liver, the gall-bladder was found to contain only a few grains of air, which, on pressure, passed into the ductus communis, distending it as with a blow-pipe. The cause of the bilious vomiting was now evident. The liver, which was perfectly healthy in structure and natural in size, continued to pour out its secretion, whether required or not, along the hepatic and common ducts into the small intestine; the gall bladder being evidently of no use in this case, on account of the constant pressure it sustained from the highly-distended colonic arch. When the bile had arrived at the duodenum, it met with no agents there with which to form new combinations, and, as the peristaltic action of the intestines was unattended by its ordinary effects, the bile regurgitated into the stomach, whence it was continually expelled. Directing my observation to the superficial appearances of the rectum, my attention was particularly arrested by its enormous size, and extraordinary position. As I have said, the sigmoid flexure of the colon was obliterated, and the gut, instead of lying compact in the fossa iliaca sinistra, became continuous with the rectum and reached as high as the umbilicus. The uterus and bladder were compressed between it and the pubic arch, so as to prevent an ordinary accumulation of urine. Having tied a ligature below the common duct, and another about three inches above the termination of the rectum, I removed from the abdomen the intestinal canal. This I inflated from above, and found that the passage was free throughout; the obstruction, therefore, appeared to be below the second ligature. I passed a probe through the anus, which, meeting with no opposition, made its appearance above the brim of

the pelvis, between the rectum and the os sacrum. From this the anus seemed to have no communication with the canal, which, on examination, proved to be the fact. On slitting open the rectum and passing in the finger, I discovered a perfect *cul de sac* at its extremity, which, however, I found unattached to the textures below. On dissecting out the parts, the uterine and vesical organs were naturally placed, but the rectum terminated about three-fourths of an inch short of the perineum; its end was connected, however, to the os coccygis and vagina by an impervious band, about the size of a goose-quill in thickness, and about an inch in length, and radiating its fibres at its anal extremity.

REMARKS.

I abstained from the administration of medicine, being of course quite in the dark, during the life of the infant, as to the precise kind of obstruction which existed. This case shows, I think, the indispensable necessity there is of the practice of midwifery being confided solely to male practitioners, educated in *all* the "*departments*" of medical and surgical science. I have little doubt that the highly-vascular and discoloured appearance of the coats of the loaded intestine, with the thick serum, of which about half an ounce was effused among its folds, and in colour and consistence like linseed oil, were the results of inflammation, superinduced by the efforts of the midwife to force open the "*costive bowels!*" If, as in this and other cases, the accoucheur can effect no permanent good, still, by knowing when to refrain, and by restraining the officiousness of others, he may afford patients, who must die, an opportunity of departing without any positive increase of suffering.

Well Street, Hackney,
August 24th, 1831.

SIR W. BURNETT.

To the Editor of THE LANCET.

SIR,—I have just seen the 410th No. of THE LANCET, published on the 20th instant, and observe with surprise and regret, that you have thought proper to insert in it a letter bearing the signature "Hercules," to which you have lent your powerful aid, by putting forth, I hope unintentionally, a misrepresentation, which I feel myself bound to contradict; and as you have so freely admitted a communication which may be fairly considered anonymous, I think you cannot with justice refuse to give this letter a place in your next Number.

I do not wish to animadvert strongly on that part of your own remarks which states, that "the Lords of the Admiralty ought to interpose their authority, and prevent an indirect solicitation for pecuniary contributions," because I imagine a very little reflection will convince you, that the Lords of the Admiralty possess no such authority; and that the officers of the navy have an undoubted and unalienable right to dispose of "the wretched pittance they receive in the shape of pay," although they should even resolve on the desperate measure of contributing "towards such a piece of foolery as the purchasing of a token of esteem, in order that the warm attachment of the donors may be known to the posterity of the donee."

But, however inconsistent such sentiments may be with the liberal principles you have generally advocated, you certainly ought to have hesitated in styling the gentlemen to whom Hercules alludes, a "self-elected committee;" and there is not one of them, I am sure, mean enough to attach any value to the sort of compliment paid them in your parenthesis—("two or three of whom [the members of the committee], by the way, we happen to know, are men of high character") since they entertain the old-fashioned opinion, that no men who can descend to state that they are appointed to a certain office by proper authority, when in fact they were self-elected, can have much regard to character; and that, in reality, persons capable of such deceit, have no claim whatever to the appellation of gentlemen.

With respect to the terms, prevention of an indirect solicitation "for pecuniary contributions," &c., I might merely observe, that the circular was not couched in the language either of direct or indirect *solicitation*; but if it be meant that Sir William Burnett did indirectly solicit any person, I owe it to him to declare, on my honour, that before the circular was ready for the press, he was accidentally made acquainted with the intentions of the committee and original subscribers; and that, without losing a moment, he desired a gentleman in his office to write to me that the matter *must* not be proceeded in; and that he, immediately after, wrote to me himself to the same effect.

An unknown writer, like Hercules, deserves nothing but contempt on his own account, and a total disregard of his virulent and illiberal letter would have been the certain fate of his miserable attempt to make an assassin-like attack on a gentleman who stands immeasurably high above the puny efforts of such a scribbler; but, as Hercules has asked certain questions, I will condescend to answer him, by stating that the committee were appointed by the unanimous voice of thirty-one naval surgeons assembled at Gosport in last June; that the meet-

ing was called not for that purpose, but that every individual present was animated by feelings of purity to which perhaps Harculo is a stranger; that all of them, and the whole corps, with the exception of such as Harculo (if, indeed, he be a naval medical officer), deeply feel, and warmly express, the obligations they owe to Sir William Burnett, for his valuable and unwearied exertions, as expressed in the circular; and that the gentlemen to whom Harculo has been pleased to designate a "parasitic committee," look only with admiration and gratitude to Sir William Burnett, although he cannot in every instance succeed in what he undertakes, for the benefit of those over whom he presides, since every member of Harculo's "parasitic committee" is already in possession of high and responsible office, or independent of the service; and none of them have any-thing further to expect in the way of promotion or emolument.

I will add, that Sir William Burnett is not more distinguished by his well-known ability and devotedness to the interests and honour of the corps at large, than by courtesy both to the senior and junior members of it; but Sir William Burnett deals even-handed justice, and it is scarcely possible, that among so numerous a body of men, he shall not have been compelled, contrary to the suggestions of his kindlier feelings, to visit the "arrogance," or ignorance, or neglect of duty, of some few individuals, with a proper display of his authority. In conclusion I would say to yourself,

"Non ego paucis
Offendar maculis, quas aut incuria fudit
Aut humana parum cavet natura."

I am, Sir,
Your very obedient servant,
JAMES SCOTT, M.D.
Junior Surgeon, Lecturer, Librarian, and Curator of the Museum, in the Royal Hospital, Haslar.

To the Editor of THE LANCET.

SIR,—In reference to a circular letter which appears in THE LANCET of Saturday last, from a *soi-disant* committee of the medical officers of the navy, it is but justice towards Sir William Burnett to state, that he did, as soon as he learned the intention of the Portsmouth junto *in June last*, convey to them, in unequivocal terms, his most decided disapproval of their scheme, on the grounds that it was calculated to injure him in his public situation, and materially to retard those improvements in the regulations for naval medical officers which he, considered necessary, as well for the benefit of the naval service generally, as of the individuals more immediately concerned. Sir William's remonstrance positively reached the self-constituted committee in June, and it seems unaccountable how they could, in direct defiance of that remonstrance, issue their circular letter dated the 1st of August.

Yours respectfully,
NO TORY.

London, Aug. 22d, 1834.

LONDON UNIVERSITY.

MR. PATTISON.

To the Editor of THE LANCET.

SIR,—As very erroneous and exaggerated statements are in circulation respecting Mr. Pattison, I beg the favour of your giving publicity to the following remarks, which I pledge myself are, in every respect, in strict accordance with truth.

No gentleman ever entered the University on better terms of amity and good fellowship with the Council, warden, and his colleagues, than did Mr. Pattison; no one doubted his industry, or his participating in the common desire to further the great objects of the institution, as far as his individual exertions would enable him to do.

The first year passed away, not without rumours and whisperings among the Council, professors, and students, which were any-thing but favourable to this gentleman, but as usual no one thought it *his* business to speak out, or to attempt a remedy for their disappointed hopes, by at once removing the cause.

The second year came, and hopes were entertained that, in the interval between this season and the last, the causes of discontent would have been obviated; but this was not the case; complaints sprung up among the students, who declared they had entered the University, and paid their fees, on the understanding that they were to receive an extended course of instruction. In the other classes, their anticipations had been more than fulfilled; but in the *anatomical*, as much from the nature of the lectures, as from the very negligent way in which they were delivered, they openly avowed they *learned nothing*. The cordiality between Mr. Pattison and his medical colleagues was broken up; some of them, however, with a desire to serve him, as well as to maintain the peace and reputation of the University, tendered him their advice and suggestions for future diligence and improvement; these were listened to, but only momentarily acted on. The Council saw the matter in its true light, and the expediency of removing him was not only contemplated, but was the theme of their discussions and *divisions* more than once: thus the second season terminated.

It was clear to all that the third season would be a failure, unless something de-

clusive were done with respect to the chair of anatomy. Unwilling still to remove Mr. Pattison, and conscious that some alteration was indispensable, they associated with him, much however against his inclination, Mr. Bennett, formerly demonstrator of anatomy, as joint professor; a gleam of hope again appeared, but it was soon extinct; the students (who are from twenty to thirty years of age) were content with the arrangement, as Mr. Bennett was looked on as a great acquisition in the anatomical class; his health however failed him, and, eventually, he died; the lectures again devolved in great measure on Mr. Pattison, fresh discontent arose, loud and repeated complaints were made to the Council, and these not leading to a very satisfactory result, the students broke out into open tumult; they might have gone away, it is true, to some other school, but they were unwilling to sacrifice the advantages they derived from the other teachers, all of whose lectures they valued.

The Council appointed a committee of their *own body* to inquire into the circumstances, which at once recommended Mr. Pattison's removal. Some proprietors, not content with the management of the Council, about the same time had a public meeting called; a committee of *proprietors* was formed, and *their* first resolution was that he ought to be removed. The Council in full conclave act on these recommendations, and he is removed. He considers himself ill used, he gets another public meeting called, and previous to the meeting taking place he publishes *his* statement of the matter, circulates it among his friends, but carefully keeps it back from the Council; the meeting takes place, and decides that there is no necessity for interfering with the decision of the Council.

Mr. Pattison, in his statement, has endeavoured to show he was always the victim of persecution from his first entering the University; why he should have been so, it is difficult to discover; he attributes it to the ill-will of the late warden, to the jealousy of Mr. Bennett, to the malice of most of his medical colleagues, but little proof is adduced of such being the case. He touches lightly on the innumerable complaints, that were sent to the Council from the class, of his erroneous descriptions in anatomy, total omission of general anatomy (which was afterwards given to Mr. Bennett), and fallacious views in physiology, of his obsolete opinions and antique theories respecting the human body generally, of his bad delivery, unclassical language, and hasty, negligent galloping through his course, all of which were advanced in memorials to the Council, and attested by the signatures of more than two-thirds of the class, including all the senior students, many of whom were members of the College of Surgeons. Official complaints were sent repeatedly from the managing committee of the University Dispensary, of his negligence and non-attendance, and in consequence, on one occasion, a vote of censure was passed on him by a Committee of the Council, of which Mr. Hume was chairman. His statement says nothing of his abrupt departure from Glasgow, or of his broils in Baltimore, which, however, Dr. Physic and Mr. Wilks exposed to the world in a printed pamphlet, copies of which are in this country. On conclusion, to impartial minds the facts must appear simply these, that he was found unfit for the situation he filled, and was, after deep and grave consideration, removed from it.

I am, Sir,
Your obedient servant,
A FRIEND TO THE UNIVERSITY.
London, Aug. 29, 1831.

GOVERNMENT OBSTRUCTIONS

TO THE CIRCULATION OF SCIENTIFIC PERIODICALS.

To the Editor of THE LANCET.

SIR,—I addressed a letter to you sometime since, stating the great inconvenience experienced by the subscribers of your Journal, owing to the privilege of franking periodicals being withdrawn, by his Grace the Duke of Richmond, from the clerks of the roads in the Dublin Post Office, and requested you would be kind enough to notice the matter either in THE BALLOT or LANCET, as my application to his Grace on the subject, requesting a continuance of the privilege, failed. During the secretaryship of Sir E. Lees, the clerks were permitted to forward for a small premium, in addition to the subscription, all periodical journals, which was a very great convenience to the public, in consequence of their rapid and regular transmission; for instance, I subscribed two guineas per annum, and I received THE LANCET here *every Tuesday evening*, whereas now I must await the *monthly* arrival of my bookseller's parcels, and get four or five numbers, as the case may be, together. The great value of so useful a publication as THE LANCET (to which I have been a subscriber since its commencement) to country practitioners, is receiving it soon after publication; and there appears to me a great want of judgment on the part of "the powers that be," in depriving the clerks of the privilege which they so long enjoyed without interruption, as the withdrawal of it cannot add a shilling to the post-office revenue, because no person will be fool enough to pay

quadruple postage for a work which costs originally but *eightpence*. I have had two letters from the Duke of Richmond on the subject, both peremptorily refusing to permit the free transmission of scientific journals. I wrote to that truly gifted nobleman the Lord Chancellor, as a member of "the Society for the Diffusion of Useful Knowledge," requesting his interference, but have had no reply; but my opinion is, that the press can do more than any individual or collective representation, and I wish you would take up the subject as warmly as it deserves, as I have no doubt your talented advocacy in this cause will lead the "*great ones*" at all events to reflection, if not to rescind their order. The Irish papers have taken up the matter with regard to literary periodicals, but not with that spirit which they ought. I fear my former letter did not reach you, as you have not noticed it in your corner "*To Correspondents*." Believe me, Sir, yours sincerely,

R. Corbett, M.D.

Innishawn, County Cork,
Aug. 21, 1831.

SINGULAR CASE OF HYDROCEPHALUS.

To the Editor of The Lancet.

Sir,—Some years ago, I met with a case of hydrocephalus very similar to the interesting one recorded by Mr. Lyons in your periodical for August the 20th. The case I allude to, was that of a young girl aged six. At the age of *five*, her mother informed me she exhibited a precocious development of the animal propensities. She had the monthly flow of the catamenia, the breasts were large, and the pubis was covered with hair. At the age of six she was seized with symptoms indicative of inflammation of the brain; for this she was bled, blistered, cupped, &c. In a short time symptoms of hydrocephalus presented themselves, and after an ineffectual attempt to subdue the disease, she died. Upon examining the body after death, but a small quantity of water was discovered in the ventricles, hardly sufficient to account for her death. The brain was perfectly free from ramollissement. The anterior portion of the brain was very small, but the *cerebellum* was inordinately developed. In fact, during the existence of the acute inflammatory symptoms, the pain was principally situated in the posterior part of the head. I should like to know from Mr. Lyons, who appears to be a very intelligent practitioner, what was the relative proportion, in point of size, between the cerebrum and cerebellum. My patient exhibited a strong disposition to gratify her animal passions, which her mother found difficult to subdue. The child always showed great deficiency in *intellect*. May not the phenomenon of the sudden removal of the mercurial action upon the occurrence of inflammation, be accounted for on the principle so lucidly explained by John Hunter, of the impossibility of two actions existing at one and the same time in the same constitution? It may be called a species of *internal* counter-irritation. On this principle Hunter explains the *modus operandi* of mercury in the venereal disease.* In Mr. Lyon's patient, the brain appears to have been very large, and consequently this *excess of size* predisposed the individual to inordinate cerebral action. The cerebellum, I should *suppose*, from the precocious development of the organs of generation, to have been large. I should like to know from Mr. Lyons whether this was the case.

I am, Sir, your obedient servant,

Forbes Winslow.

London, Aug. 29th, 1831.

THE LATE MR. BENNETT AND EX-PROFESSOR PATTISON.

To the Editor of The Lancet.

Sir,—The Council, the pupils, and several of the professors of the London University, have been attacked in the most ignorant and spiteful manner by the press; and among the rest, a Sunday paper, called "*The Examiner*," has poured forth the most bitter abuse against the students of the University; and what still more forcibly betrays the baseness of the writer, is the false and perverted statement which he has made respecting my brother, Mr. Bennett, the late professor *of that part of anatomy which Mr. Pattison did not teach*. Now, Mr. Editor, allow me to ask you, if the pupils have not sufficient intellect to enable them to recognise the wide difference between "*a very good teacher*," *and* "*a very bad one*," who then are the persons that have an opportunity of discovering the talents of the one, or the ignorance of the other? Surely, it is not the Editor of *The Examiner*, or *The Times*, or *Herald*, or any other daily or weekly paper, unless he have impartial evidence by which he can decide.

Mr. Bennett *accepted* the situation of demonstrator in the University, with the understanding that it should be considered as *quite distinct* from the office of "Professor Pattison"—that it should have no connexion whatever with the chair of anatomy. *The Examiner* states that Mr. Bennett should have *worked under Pattison as his "servant."* Oh! yes, his servant, what

* Hunter on the Blood, Inflammation, &c.

impudence!!! Mr. Bennett would rather have perished than work under a man who was declared "*by his own pupils to be an incompetent teacher.*" I have heard Cuvier, Boyer, Roux, and several first-rate men in France, I have heard some excellent lecturers in this country and also in Ireland, and I openly declare that I have never heard such a teacher as "Mr. Pattison." Mr. Pattison has published certain gross and extravagant statements about Mr. Bennett, but I shall only state that he may continue his venom, as Mr. Bennett is not here to defend himself; they may all write and write until their pens become as blunt as their intellects, but this noisy man and rejected teacher will never again be permitted to give lectures in the University of London.

I have the honour to be, Sir,

Your obedient servant,

D. Shea.

London, Aug. 29, 1831.

P.S.—Although, Sir, I was not on the very best understanding with Mr. Bennett before his death, still I feel it is my duty to refute the statement which Mr. Pattison has made to excite compassion from persons who appear to know little about the University, and still less about himself.

"A PRACTICE OF £300 PER ANNUM IN AN IMPROVING NEIGHBOURHOOD."

To the Editor of The Lancet.

Sir,—Anxious to establish myself in my profession, I have turned my attention during the last two months to the medical advertisements which have appeared occasionally in *The Times* newspaper. I will now proceed to give you the result of my inquiries in two or three instances, that such of your readers as are "on the look-out" with myself, may be able to appreciate what is meant by these balloon phrases,—"An eligible medical practice to be disposed of," "satisfactory reasons given for leaving," "parties retiring from ill health." &c.

Furnished, as I have above said, with my *renseignements*, the first advertisement that I attended to, was one inviting any active young man to purchase a steadily-increasing practice. This, said I to myself, will just suit me, possessing, as I do, the negative qualifications of being neither lame, nor blind, nor old; and as it is an increasing affair, there is no knowing where it will end. I arrived at the house of the advertiser, and from its antiquated, dilapidated state, I at once drew the inference, that his practice was as ineligible as his tenement, but I concluded that he was, perhaps, a modern Diogenes, caring little about appearances. His business, he said, was of a fluctuating kind, taking a wide range from 100*l.* to 250*l.* a year; his house could be made comfortable by an outlay of 100*l.*, and the fixtures were of a useful kind, being two grates, and a water-butt. For these advantages he asked 500*l.* from me, and for this sum I was to step into his shoes, and into—his water-butt also.

The next "eligible practice" I went in search of, was one that was hung out for sale in consequence of the "illness of one of the parties." This surely must be a flowery opportunity, thought I; but who do you think, Sir, was "one of the parties?" why, the *wife* of the advertiser. This was certainly a *de facto* partnership, but it was of too intimate a nature for me to have anything to do with.

I beg of you to bear with me a little longer, while I give you my third and last specimen:—"A practice of 300*l.* a year, with retail, in an improving neighbourhood." This was a dusty, dingy pharmacie, a sentry-box-shaped tabernacle of Æsculapius, a facsimile of the spot where Romeo bought his love-dose. From this the proprietor civilly proposed to show me the rest of the premises, ushering me first into a place which decency forbids me to name, but which was appropriated, when necessary, to the purposes of a surgery. From this saloon, which

"Served him for kitchen, for parlour, and hall,"

we passed into a room, the window of which looked upon the "improving neighbourhood," a prison and a hackney-coach stand. Here I could not refrain from smiling, for the witticism of the gentleman's advertisement instantly struck me. I thanked the advertiser for his politeness, but declined having any connexion with a situation, the contiguity of which to the "improving neighbourhood," would always give an unpleasant foreboding of incarceration.

I am, Sir, yours, &c.

Viator.

August 22, 1831.

TO CORRESPONDENTS.

The note of Dr. James Johnson, and several other communications, are unavoidably postponed till next week, when we hope to be enabled to furnish satisfactory replies to the queries of numerous correspondents.

O. O. O. We are of opinion that Dr. Tweedie was decidedly in error in openly declining to consult with Dr. Ramadge, in the presence of the patient's family. Professional etiquette, on such occasions, ought not to interfere with our duties to the sufferers. After the visit, Dr. Tweedie, if he had thought proper to do so, might have intimated to the family that there were circumstances which rendered it inexpedient for him to continue to meet Dr. Ramadge in consultation. Our correspondent "One," is requested to favour us with his name and address confidentially.